

Psychological Abstracts

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GENERAL

1457. **Cattell, J. McK.** Contributions that have been made by pure science to the advancement of engineering and industry: psychology. *Scient. Mo.*, 1927, 24, 324-328.—Engineering and applied science have done more to control human behavior than have those agencies with this end directly in view, such as churches, schools, court, and state. The most extensive applications of psychology have been in education and in testing, but psychology, engineering, and industry have in common a great number of important problems.—*J. F. Dashiell* (North Carolina).

1458. **Cousin, G.** Dispositif nouveau pour l'étude du galvanotropisme. (A new set-up for the study of galvanotropism.) *Recherches et inventions*, 1927, 8, 100-105.—Description of a set-up to facilitate the study of movements oriented with respect to electric stimulation. Owing to the facility with which the current may be reversed by means of an inverter, it is possible to show plainly, either microscopically for plankton and the protists, or with the naked eye for the larger animals, the inversion of the displacement sense in the animals under observation.—*Math. H. Piéron* (Sorbonne).

1459. **Jordan, G. J.** The story of psychology: a handbook for every man. New York: Greenberg, 1926. Pp. 147. \$1.50.—The author of this semi-popular volume proposes "to summarize in a convenient form the results, so far attained, of the researches of the best scholars in those departments of life which concern every man." Psychology deals with mental happenings as facts; it seeks the conditions under which these happenings occur, the conscious and unconscious motive behind them, and the influence of outward circumstances upon them. These mental happenings, which, under the title "The raw material of psychology," form the subject matter of the first chapter, are instincts, reason, conscience, and environment (the latter included for the sake of the behaviorist because of his stress on the reaction of man to his surroundings). The remainder of the book is devoted to discussion of the organization of these raw materials as they are concerned in character formation, in health, in everyday life, and in religion. The treatment is largely psychoanalytical. A selected bibliography of 19 titles appears at the beginning of the book.—*L. M. Harden* (Clark).

1460. **Laporte, J.** Le coeur et la raison selon Pascal. Part II. (Heart and intellect according to Pascal.) *Rev. Phil.*, 1927, 52, 255-299.—This paper deals with Pascal's conception of the heart, showing first of all where he considers its domain to lie, viz., in the Christian faith, in the social world, and in the moral, esthetic and scientific spirit. Secondly, Pascal's definition of the heart is discussed, revealing how he considered it to be a special faculty, the basis of the will, and the sentiment of our intimate being and of its capacities.—*T. M. Abel* (Cornell).

1461. **Ravaisson, —.** De l'habitude. (Habit.) Paris: Alcan (Bibliothèque de philosophie contemporaine), 1927. (Nouvelle édition avec préface de J. Baruzi.) Pp. 63.—Re-edition of the book on habit (1838) whose first reprint (1894) was sold out long ago. In a long introduction of 35 pages, J. Baruzi attempts to investigate the influences which may have affected Ravaisson, princi-

pally that of Schelling, also those of Maine de Biran and Bichat. No bibliography.—*Math. H. Piéron* (Sorbonne).

1462. **Richet, Ch.** *L'intelligence et l'homme. Etude de psychologie et de physiologie.* (Intelligence and man. A psychological and physiological study.) Paris: Alcan (Bibliothèque de philosophie contemporaine), 1927. Pp. 375.—A study of some very important psychological and physiological questions. Two principal ideas are set forth in this book: (1) admiration of human intelligence, and (2) the belief in progress and in a (perhaps far-off) future where justice will reign supreme. The following questions are considered: (1) What is civilization? There are, the author says, some very complex elements in civilization, like science and art, but above all there are the laws of liberty and justice, regard for the rights of others and the regard for our individual dignity. (2) Language and intelligence. Language differentiates people more than ideas—language creates thought. (3) The conditions of certainty. There is no certainty except for habitual facts. (4) Origins and modalities of memory. Memory is the crowning arch of the intellectual structure; without it there would be neither imagination, judgment, language, nor consciousness. Memory as generally understood, i.e., evocable memory, is the fourth stage of the following mnemonic series: (a) Brief stimulation and prolonged response (muscular contraction); (b) brief stimulation whose state will persist for some minutes in a latent state (elementary memory); (c) stimulation whose effect persists indefinitely (fixative memory); and (d) stimulation which is fixed in memory and may reappear when evoked (evocative memory). (5) A new hypothesis in general biology. (6) Fear. Fear is one of the tripartite emotions (pain, mortification, fear) making up the whole of the repulsive emotions; it is a conscious reflex-action whose principal cause is the unknown and which generally is increased by the attention we are paying to this unknown. (7) Non-sensorial means of knowledge and the experimental method. There are other roads to knowledge than the normal sensorial ones, namely, unknown vibrations which possibly impinge upon the intelligence, conveying to it some unforeseen information which the experimental method ought to try to elucidate. (8) The struggle for carbon. (9) The psychological bases of ethics. (10) Self-mastery, domination of reflex-actions by an active will. (11) Final causes of biology. (12) Courage. There is no bibliography.—*Math. H. Piéron* (Sorbonne).

1463. **Robinson, E. S.** *Practical psychology.* New York: Macmillan, 1926. Pp. xii + 479.—This text is written with a view to fulfill the needs of the short course. It is an effort to "integrate psychology with the issues of the work-a-day world." The text is divided into six main sections: Preparation for psychology, Habits and their acquisition, Perception, Ideation, Feeling, and a section entitled "The individual." The first consists of a demarcation of subject-matter and outline of methods and applications of scientific psychology. It has further a chapter presenting essential anatomical and physiological facts. The second part is a straightforward account of habit formation, fixation and elimination, and operation. The section on perception includes a discussion of attention as well as an account of the operation of the several sense departments and their anatomical basis. Part 4 on ideation takes up ideas and concepts, memory, imagination, and reasoning. Feeling next receives a brief and orthodox treatment. Part 6, dealing with the individual, includes a chapter on personality and one dealing with human abilities and their quantitative measurement. Each chapter is briefly summarized. There is further a list of references given in connection with each topic. A classified reference list is also given at the end.—*F. A. Geldard* (Clark).

1464. **Souriau, M.** *La fonction pratique de la finalité.* (The practical aspects of finality.) Paris: Alcan (Bibliothèque de philosophie contemporaine),

1927. Pp. 264.—The author states the problem of moral principles in its simplest form: What ought we to do? What are the conditions conducive to efficacious, legitimate ethics? He compares the avowed principles of three moralists, Maine de Biran, Kant, and Renouvier, with their acts and lives. All legitimate and efficacious ethics rest on the idea of finality, conceived as a practical guide bridging over from finite time into eternity. Part 1. A study of the moralists: Maine de Biran, ethics and the ego; Kant, ethics and reason; Renouvier, ethics and emotion. Part 2. Psychology and physiology; consciousness and finality; time and finality; practical implications of the doctrine of finality. No bibliography.—*Math. H. Piéron* (Sorbonne).

1465. **Zalmanson, A.** [In defence of the objective tendency in psychology.] *Vestnik Kommunisticheskoy Akademii* (Bulletin of the Communist Academy), 18, 189-203.—The author defends objective psychology against the charge of crude materialism made by Kornilov. He denies categorically that Russian objective psychology or reflexology has ever identified motion with awareness or held that real things and perceived things are exactly the same. Objective psychology is compatible even with such a "double aspect" hypothesis as that "the psychical is the introspective expression of the physiological process." Furthermore, introspection itself is within limits to be considered a legitimate aid to objective observation, although Feuerbach's statement that "products but not processes of the organism's activities are given in consciousness" is quoted with approval. Statements from the works of Marx, Plekhanov, Lenin, and Bukharin are cited to bear upon the author's views. It is also pointed out that while in 1922 Marxian teachings were used as arguments against subjective psychology, there are attempts being made now to turn them against reflexology.—*H. S. Razran* (Columbia).

[See also abstracts 1505, 1518, 1527, 1533.]

SENSATION AND PERCEPTION

1466. **Atkins, E. W.** The efficiency of the eye under different intensities of illumination. *J. Comp. Psychol.*, 1927, 7, 1-37.—Requiring undergraduates in psychology to cross out 1's, 2's, and 3's in the Johns Hopkins Number Work Test under various conditions of illumination and on black and white table-tops, with black and white surrounding screens, the effects of practice under such conditions of illumination and background were studied. The subject's general condition before, during, and following each practice period was determined by his success in doing the Dunlap Coördination Test and the Bates Chain Association Test. Pulse rate was also determined before and after each work period. Under the black surroundings, a brightness of light of 37 millilamberts gave the highest efficiency. Higher and lower brightnesses, with the black surroundings, were less comfortable to the subjects. Under white surroundings, all the different degrees of illumination (6.7, 17.5, 36.5, 47.3, and 86.0 millilamberts) led to approximately equal degrees of efficiency. Since the subjects did not find the lowest illumination, with white surroundings, too uncomfortable to work under, it is not determined whether contrast in the visual field, the total amount of light entering the eye, or both, controls the efficiency of the eye under a given light. Since the reports of the subjects as to comfort or discomfort do not check with the efficiencies of the work accomplished under the various conditions of illumination, it must be that the adaptability of the eye itself is so great as to prevent the work records from showing the effects of illumination. It is suggested that much finer discrimination, such as for smaller type, than that used might have more

directly brought to light the effects of varied illuminations. One cut of apparatus, 14 graphs, 16 tables, and 30 references are given.—*H. R. Crosland* (Oregon).

1467. **Aves, O.** Some notes and statistical tables on the relative distribution of refractive defects, and their correction. *Proc. Opt. Conv.*, 1926, 424-450.—The paper is a compilation of tables of statistics concerning refractive errors and their correction. The statistics are based on 2500 cases. Corresponding tables, from the work of other investigators, have also been included for comparison. The tables give information and notes on the following subjects: sex distribution, age distribution, the average length of observation of each case considered, prescriptions supplied, vision without correction of each eye separately, the difference in vision between the two eyes before correction, the visual acuity after correction, the difference in visual acuity between the two eyes after correction, the distribution of refractive defects, the relative strengths of spherical lenses, the similar distribution of strengths of cylindrical corrections, the orientation of the axes of cylinders, groupings of occupations of patients, groupings of symptoms, difference between spheres in two eyes, difference between cylinders in two eyes, table of lenses used in the correction of low errors of refraction.—*J. R. Liggett* (Clark).

1468. **Bennett, A. L.** A measurement of the efficiency of the ears as a means of detecting short time intervals. *J. Opt. Soc. Amer.*, 1927, 14, 342-345.—Recording the per cent. successes that the observer attains in his attempts to distinguish which of his ears receives the first of a pair of nearly simultaneous sound stimuli, Bennett finds that: (1) two pulses separated by a time interval of 0.0001 seconds are just distinguishable with certainty; (2) fatigue lowers the per cent. successes with time intervals of about 0.0001 seconds; and (3) the response of the observer to such a pair of stimuli is that there exists a single pulse which comes from the right or left depending on whether the first pulse is received in the right or left ear respectively.—*D. B. Judd* (Bureau of Standards).

1469. **Dobson, M.** Muscular imbalance, charted with Esdaile's myophoriagraph. *Proc. Opt. Conv.*, 1926, 451-453.—The writer describes a system of testing the eyes for muscular imbalance. The advantages claimed for the method are that a written record of all muscular imbalance can be made, and the strength of the eye muscles can be recorded in all directions. The method determines the faulty muscles, and to which eye they belong.—*J. R. Liggett* (Clark).

1470. **Fincham, E. F.** The mechanism of accommodation—its anatomical and physiological aspects. *Proc. Opt. Conv.*, 1926, 454-471.—The first part of the paper deals with the anatomy of the parts concerned in the accommodation of the eye. The form of the lens and the properties of the lens substance are discussed, and tables and illustrations showing the variations in the thickness of the capsule are given. The description of the ciliary muscle includes a detailed account of the reticulated arrangement of the muscle fibres in the internal portion as ascertained from the study of surface sections. In the second part of the paper is given an account of a number of observations by the author on the changes in radius of curvature and form and position of the lens surfaces in accommodation. These data show a marked variation in different individuals. The behavior of the empty lens capsule is shown to be in agreement with the theory which the author has suggested regarding the effect of the capsule in accommodation. The comparative immobility of the posterior surface of the lens and the hyperbolic form of the accommodated anterior surface, as well as the differences in the behavior of the surfaces in different individuals, are explained by the Helmholtz theory by taking into account the properties of the lens capsule.—*J. R. Liggett* (Clark).

1471. **Goebel, O.** *Subjektive Vertiefung eines dem Labyrinth zugeleiteten einfachen Stimmgabeltones.* (The subjective lowering of a simple tone of a tuning-fork conducted to the labyrinth.) *Arch. f. Ohrenk.*, 1926, 116, 42-55.—The author confirms the observations of Brünings, that when a tuning fork is placed against the bones of the head (held by the author between his teeth) and is simultaneously connected with the ear passage by a tube, no length of the tube will give rise to interference-diminution, but that at best a reinforcement of tone is noted. He believes that this proves that resonance vibrations are not the medium by which tone sensations are transmitted, no matter in what detailed form one chooses to present the theory of resonance. Furthermore, he considers the after-effect, which is included in the resonance theory, to be inconsistent with the muting that actually makes the organ of hearing the organ of time-measurement. But in contrast to this, it is correct "to assume relatively undamped light-vibrations in the rods and cones," which produce after-images. On the basis of his own sound-theory, which he has expounded in these *Archives* since Vol. 87, he would be led to expect, under the above-mentioned conditions of interference, a lowering of the tone, and this he claims actually to have observed, in that the tone c_1 went down to F , the tone c_2 to F_1 , if the two waves differed to the extent of $\frac{1}{2} \lambda$, and the end of the tube came in contact with a prong of the fork. In accord with his theory, the lowering continued even to the extent of an additional whole tone, if the difference in the waves amounted to $\frac{1}{4} \lambda$, and this was observed for different positions of the tube relative to the fork. The subjective combination-tones, too, vary with the relation of the source of sound to the ear, and need to be tested and verified; the doctrine of combination-tones of "higher order" he considers untenable.—*W. Wirth* (Leipzig).

1472. **Hazelhoff, F. F., & Wiersma, H.** *La sensibilité relative aux différences (la loi de Weber).* (The relative sensibility to differences—Weber's law.) *Arch. néerl. de physiol.*, 1926, 10, 66-81.—The authors compare the abilities of 10 normal and 10 hysterical subjects to discriminate visual sensory differences at what they term high and low ranges of stimulation. As stimuli, figures drawn upon white paper with black ink of graded dilutions were used. Each successive dilution was just half as strong as the preceding. By varying the strength or the distance of the light source from the paper containing the figures stimuli of the desired intensities were secured. Each subject was allowed two minutes to view the stimuli and the comparisons were based upon the average number of figures discerned by the normal and hysterical subjects. Apparently experiments were not repeated in order that conclusions might be based upon individual averages for repeated trials. The results are summarized as follows: (1) Sensibility to differences in visual stimuli is less acute in hysterical than in normal subjects. (2) Decrease in the sensitivity to very intense and very weak stimuli is greater and more often found in hysterical than in normal subjects. (3) Without visual adaptation this decrease is greater in amount than with adaptation, especially in hysterical subjects. (4) The results indicate that the cause of sensitivity to differences and the basis of Weber's law are of a psychological nature and are in accord with the theory of Heymans, according to whom: (a) sensibility to differences is a phenomenon of psychic inhibition; (b) relative sensibility to differences is explained by the proportionality between intensity of excitation and the intensity of sensation, and the inhibitory action exercised by the sensation excited; (c) decrease in sensitivity with very weak stimuli results from the fact that non-eliminated images of consciousness come freely into play; and (d) decrease in sensitivity with very strong stimuli is caused by the inhibitory action of the affective sentiments against very strong sensations (feelings of unpleasantness).—*C. P. Stone* (Stanford).

1473. Held, H., & Kleinknecht, F. **Die Locale Entspannung der Basilarmembran und ihre Hörlücken.** (The local relaxation of the basilar membrane and its auditory gaps.) *Pflüg. Arch. f. d. ges. Physiol.*, 1927, **216**, 1-31.—The tension of a narrow strip of the basilar membrane of guinea pigs' ears was altered by drilling the bony cochlea without injury to the organ of Corti. Tonal gaps were produced, as indicated by absence of the ear muscle reflex to certain pitches. The gaps agree satisfactorily in extent with the calculated conditions. Results agree with evidence obtained by others from cases of degeneration. The Helmholtz theory explains the results obtained better than does the Ewald theory.—L. T. Spencer (Yale).

1474. Kollarits, L. **Einfluss der Pupillenweite auf die Grösse des Wahrnehmungsbildes.** (The influence of the size of the pupil upon the size of the visual image.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, **79**, 265-269.—The author observes the well-known diminution of the retinal image during the process of adjustment which is produced by the simultaneous effect of a searchlight upon the eye.—W. Wirth (Leipzig).

1475. Kolmer, W. **Über das Verhalten der Deckmembranen zum Sinnesepithel der Labyrinthendstellen; eine Erwiderung auf die Darstellung Karl Wittmaacks.** (Aus dem physiologischen Institut der Wiener Universität.) (On the relation between the tectorial membranes and the sensory epithelium of the termini of the labyrinth; a reply to Karl Wittmaack's presentation. From the Physiological Institute of the University of Vienna.) *Arch. f. Ohrenk.*, 1926, **116**, 10-26.—Kolmer defends his presentation in the "Handbook of Neurology of the Ear" of Alexander and Marburg, against the attacks of Wittmaack; the latter conceives the tectorial membranes of the maculae and cristae to have originated by the cilia of the sensory cells putting forth laterally branching processes, and these becoming matted to form the gelatinous substances of the end organs, whereby the cupula of the otolithic membrane would be immovably fixed upon the cilia. Even though this adhesion of the membrane to the transitional epithelia may be true to fact, it cannot be due to the cilia of the sensory cells, whose processes in Wittmaack's preparation are artificial products. On the basis of exhaustive observation on about 100 vertebrates, the author denies the relationship of the gelatine and the cilia, as does Held also. Furthermore, the latter's method of studying embryonic evolution led Kolmer to the conclusion, in the case of twenty human embryos, that from the moment when sensory and supporting cells can be distinguished, a relationship can be found with the supporting cells only. But even this relationship the author proposes to treat more warily, and refers to an article soon to appear in the Handbook of Histology by von Möllendorff. The same division must also be assumed for the auditory cilia and Corti's membrane over the organ of Corti, for which Wittmaack, in spite of Held's criticism, assumes that the sensory cilia are merged continuously into the tectorial membrane. By means of a picture of Corti's organ in a three months old cat, it is here shown how Wittmaack's conception might be suggested through an illusion due to the vestiges of the embryonic connection in the supporting tissue; Zimmermann, in his newest interpretation of the function of Corti's organ, also denies the relationship.—W. Wirth (Leipzig).

1476. Seashore, C. E. **Phonophotography in the measurement of the expression of emotion in music and speech.** *Scient. Mo.*, 1927, **24**, 463-371.—Photography of air vibrations shows up their various attributes (frequency, amplitude, duration, form), so that when recorded on a specially prepared scientific musical staff, a highly detailed record can be taken of any voiced sound. A particular finding is the presence of vibrato (defined as a synchronous oscillation of pitch and of intensity at a rate of from five to eight per second) in artistic

singing, especially if emotional, and in speech. This may possibly be traceable to the rates of innervation of muscles involved in the production of the tone.—*J. F. Dashiell* (North Carolina).

1477. **Swaine, W.** A statistical study of refractive errors. *Proc. Opt. Conv.*, 1926, 472-491.—The author describes his work as a preliminary survey of records of optically defective eyes, gleaned from several sources. Tables of figures, curves, and histograms are given. They have been classified in order to show the following relations: age and sex distributions; visual acuity before and after correction; classification of ametropia, comparative frequency; astigmatism "with" and "against" the rule; age and sex factors; distribution of refractive errors expressed by degree of defect and axis orientation; astigmatism and ametropia, and degrees and kinds related graphically; variation of mean defect and mean anisometropic difference with age.—*J. R. Liggett* (Clark).

1478. **Wittmaack, K.** Ein kurzes Schlusswort zu der vorstehenden Erwiderung W. Kolmers "Über das Verhalten der Deckmembranen zum Sinnesepithel der Labyrinthwand." (A brief closing word on the foregoing reply of W. Kolmer, "On the relation between the tectorial membranes and the sensory epithelium of the termini of the labyrinth.") *Arch. f. Ohrenk.*, 1926, 116, 27-30.—Wittmaack defends his method of intravital preparation with weak salt solutions diffused through the membrane of the fenestra rotunda, and bathing with weak dystonic solutions immediately before fixation. He abides by his observation, which frequently showed the transition of the sensory cilia into the structure of the cupula, and maintains that the branching of the sensory cilia in the course of this transition is an objective finding. Furthermore, an essay by Dr. Werner, on the cupula in the labyrinth of fishes, is promised to appear in the *Zeitschrift für wissenschaftliche Biologie*.—*W. Wirth* (Leipzig).

[See also abstracts 1495, 1496, 1538.]

FEELING AND EMOTION

1479. [Anon.] The sense of joy. *Nation*, 1927, 124, 468.—On "the curiously superstitious emphasis we place upon the sense of humor—demanding that it exist, and almost daring it to show itself, lest someone, admitting his lack of it, be forthwith damned." It is to be suspected that this insistence, like that on most "axioms," cloaks, not a remarkably keen sensitiveness to the nuances of life, but the opposite. How many devotees of the humor dogma, for instance, have a feeling for the sense of joy—"the distinguishing mark of supremely and passionately happy persons"?—*R. R. Willoughby* (Clark).

1480. **Pradines, M.** L'hétérogénéité fonctionnelle du plaisir et de la douleur. Part I. (Functional heterogeneity of pleasure and pain.) *Rev. Phil.*, 1927, 52, 178-212.—A logical discussion of the differences between pleasure and pain. Pleasure is derived from two basic needs, hunger, including thirst, and sex. These needs are not localized in any part of the body, but are part and parcel of the whole organism; whereas sensations of pain are always localized in definite somatic regions. There may be pseudo-pleasures, as after the alleviation of a sharp pain, but these are not positively affective, they are non-hedonistic. There may be pseudo-pains in connection with the needs, as when the sex impulse is thwarted. But real pleasures and pains arise from entirely separate functions and under no condition do they shade off into one another. According to Ribot, pleasure and pain differ in degree; according to this author they differ in quality.—*T. M. Abel* (Cornell).

[See also abstracts 1476, 1484.]

ATTENTION, MEMORY AND THOUGHT

1481. Duncker, K. A qualitative (experimental and theoretical) study of productive thinking (solving of comprehensible problems). *Ped. Sem.*, 1926, 33, 642-708.—Criticisms of current theoretical analyses of reasoning, and experimentation upon seven subjects with twenty problems (largely physical in type), led to a formulation of the process of thinking. After the problematic situation is comprehended as containing a conflict, the thinking enters with the penetration into the conflicting circumstances (insight-grasp of the conditions causing conflict), and leads to a realization of the functional value of the insight.—J. F. Dashiell (North Carolina).

1482. Leven, E. Die eidetische Anlage der Jugendlichen. (The eidetic propensity of the young.) *Arch. f. Rassen- u. Gesellsch.-biol.*, 18, 431-434.—Treats the eidetic propensity as a normal characteristic, which is repeated in the individual according to the biogenetic law as a consequence of its regular rôle in the development of the race; because for purposes of a nomadic life, supported by the chase, it was essential that sense images should be vividly retained.—W. Wirth (Leipzig).

1483. Templin, O., & McCracken, A. A guide to thinking. New York: Doubleday, Page, 1927. Pp. xiv + 252. \$1.50.—A simply written work to facilitate the teaching of logic "to young people having little or no training in philosophical studies." Four parts treat respectively knowledge, the materials of thinking, methods of thinking, and pathology and results of thinking. No theory of knowledge is offered more profound than that it "corresponds with objective reality"—the latter remaining undefined. The attention given to those components of thinking which are not fully conscious is, to say the least, slight; it is assumed, for example, that "we" can direct the thinking which goes on within us to the solution of any particular problem, and mild exhortations to that effect are given. "Reverie," also, is characterized as of little value, but the closely allied field of "creative thinking"—including artistic creation—is to be cultivated. The mechanics of formal logic are clearly analyzed, but induction, etc., is only described. The "pathology of thinking" is not a consideration of abnormal phenomena, but of the standard fallacies. Much tolerance and understanding of human nature are displayed.—R. R. Willoughby (Clark).

[See also abstracts 1462, 1563, 1640.]

NERVOUS SYSTEM

1484. Dumas, G., & Tinel, J. Etude des réactions vaso-motrices au cours des efforts momentanés d'attente et des petits chocs émotifs. (A study of vaso-motor reactions during brief periods of attention and slight emotional shocks.) *Encéph.*, 1927, 138-140.—These investigations were made on subjects with an opening in the skull caused by trepanning. They confirmed the author's doubts regarding the theory of Mosso, who, in stating considerable variations in intercranial circulation, thought he saw in these reactions the essence of cerebral activity. The authors were able to observe, with either intellectual effort or slight emotional disturbance, now vaso-dilation, now vaso-constriction of the cerebral arteries, reactions which themselves appear sometimes in accordance, sometimes in discordance with the other vaso-motor or peripheral actions. It may be possible, according to the authors, to observe in the course of prolonged cerebral exertion some vaso-motor reactions which are more directly related to brain function, but as to elementary psychical actions, the observed modifications

apparently have no relation with cerebral functions and consequently no really psychological significance.—*Math. H. Piéron* (Sorbonne).

1485. **Freeman, W.** The columnar arrangement of the primary afferent centers in the brain-stem of man. *J. Nerv. & Ment. Dis.*, 1927, **65**, 282-307.—This is an installment of a continued article. The entering fibers of the posterior root of the Gasserian ganglion divide upon entering the pons, one division going to the main sensory nucleus and the other turning caudad in the tractus spinalis trigemini. The segmentation of the oral end of the body is shown to center about the mouth. The interoceptive column receives fibers from all of the mixed nerves. The tractus solitarius conveys not gustatory but general visceral sensation. The eighth nerve is a highly specialized portion of the seventh nerve subserving hearing, a special proprioceptive, conative sense; and equilibration, a special proprioceptive, automatic, postural sense. This part of the article stops just as the description of the proprioceptive column is begun.—*O. W. Richards* (Boston Psychopathic Hospital).

1486. **Lapinsky, M.** Über die zentripetalen Bahnen, welche die Ausstrahlungen und Reflexerscheinungen an dem Kopfende bei visceralen Erkrankungen vermitteln. (On the centripetal pathways which transmit the radiations and reflex phenomena anteriorly in visceral afflictions.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, **79**, 230-264.—The author seeks to establish, with the aid of a wide literature and a few original cases, a more precise picture of the origin of the so-called "zones of Head" of reflex pains, etc. at the anterior end. He recognizes the frequent influences of the solar plexus, cervical ganglia and medulla and even higher centres upon the vaso-motor processes at the head. For the radiated pains and parasthesias, the trigeminal nucleus is the agent; its smallest particles are connected from the very beginning with the cerebral motor, secretory and other neurons, which consequently are also affected by the viscera. One important carrier of visceral excitement is the ramus ascendens of the sympathetic system, which in man has gained most at the expense of the vagus. It carries to a considerable height centripetally conductive fibres, as well as the motor ones.—*W. Wirth* (Leipzig).

1487. **Ten Cate, J.** Contribution à la localisation fonctionnelle dans le cervelet. Le paraflocculus. (Contribution on the localization of function in the cerebellum. The paraflocculus.) *Arch. néerl. de physiol.*, 1926, **10**, 24-53.—The author reviews the literature on localization of function in the cerebellum and describes personally conducted experiments designed to ascertain the functions of the paraflocculus, a fairly prominent part of the cerebellar hemispheres. The experiments consist essentially of ablation of small or large portions of the paraflocculus in cats (28 animals) together with subsequent correlation of lesions with the observed disturbances of equilibrium, movement, and locomotion. From these experiments he concludes that the paraflocculus, like the cerebellum as a whole, may be considered a reflex organ receiving static and kinaesthetic impulses of peripheral origin via the spinocerebellar tracts. After elaboration these impulses are transmitted to the bulbar and spinal motor systems, wherein they exercise a tonic, sthenic, and equilibrating influence upon the homo-lateral extremities. Lesions of the paraflocculus give rise to disorders of motor and static equilibrium and disturbances of movements in the homo-lateral extremities.—*C. P. Stone* (Stanford).

1488. **van Rijnberk, G.** Idées actuelles et derniers travaux concernant les fonctions du cervelet. (Modern conception and recent works on the functions of the cerebellum.) *Arch. néerl. de physiol.*, 1926, **10**, 155-182.—A technical resumé of recent literature on the functions of the cerebellum. Part 1 reviews assumed functions arising from morphological considerations. Part 2 deals with

experimental studies on ablation of the cerebellum in reptiles, birds, and mammals, the rôle of the cerebellum in labyrinthian reflexes, its participation in decerebrate rigidity, and its autonomic functions. Part 3 deals with clinical evidences derived from observations of the effects of cerebellar lesions in man. Part 4 is a brief resumé of the preceding sections.—*C. P. Stone* (Stanford).

1489. **van Rijnberk, G.** *Les dernières recherches relatives à la question de la localization dans le cervelet.* (Recent research on the question of localization in the cerebellum.) *Arch. néerl. de physiol.*, 1926, **10**, 183-301.—A very comprehensive and technical paper dealing with morphological, experimental, and clinical evidence for localization of function in the cerebellum. Conclusions reached by the author are as follows: (1) In the cerebellum of mammals and probably also of man there are demonstrable circumscribed areas or centers which exercise a preferential influence on the tonus of definite muscle groups. (2) Following the schema of Bolk, these regions are: (a) the lobus simplex for the neck muscles; (b) crus 1 with the lobulus ansiformis for the homolateral muscles of the fore-limbs; crus 2 with the lobulus paramedianus for the homolateral muscles of the hind-limbs. (3) Within these limb centers there probably exists a special area for the different functional groups of muscles of the limbs. (4) Nothing positive can yet be said concerning the function of the other lobes in the schema of Bolk. (5) None of the other indications resting on morphological grounds relative to the functions and functional divisions of the cerebellum have been confirmed by experimental data or clinical findings.—*G. P. Stone* (Stanford).

1490. **Wintersein, H., & Hirschberg, E.** *Alles- oder Nichts-Gesetz und Stoffwechsel.* (The all-or-nothing law and metabolism.) *Pflüg. Arch. f. d. ges. Physiol.*, 1927, **216**, 271-280.—The amount of oxygen consumption varies with the intensity of electrical stimulation of spinal cord, peripheral nerve, and skeletal muscle preparations. This is also true of the stomach muscle when immersed in a salt solution; the relation is inverse when the stomach muscle is in an oxygen atmosphere. This reversal is tentatively accounted for by the nature of the stomach muscle and its reaction in the two milieus. The amount of oxygen consumption of heart muscle is independent of the stimulus intensity. The apparent contradiction of the all or nothing law in the case of all the above tissues except the heart is explained as a result of a conversion of variation in stimulus intensity to a variation in stimulus frequency due to the phenomenon of relative refractory phase. The relatively long duration of the absolute refractory phase in the heart makes this conversion impossible in tissue of that organ.—*L. T. Spencer* (Yale).

1491. **Wisocki, J.** *Contribution à la question de l'influence réciproque des deux hémisphères cérébraux.* (A contribution on the question of the reciprocal influence of the two cerebral hemispheres.) *C. r. Soc. biol.* (Société polonaise de Biologie, Section de Lwow), 1927, **96**, 572-575.—A continuation of former researches carried on by the author in collaboration with Zbyszewski, indicating that the cerebral hemispheres exercise a reciprocal influence upon each other, usually in the form of dynamogenesis. They had shown that electrical stimulation of both hemispheres produced a momentary and immediate effect, whereas chemical stimulation (by strychnine and phenic acid) of one hemisphere did not produce the phenomenon of dynamogenesis except after prolonged stimulation; this the authors attributed to the fact that the chemical action is continuous and that there is summation of stimulation. Wisocki in this study wished to verify his former hypothesis by studying the effect of prolonged electrical stimulation (Exner's method). In the first series of 26 experiments he applied for several minutes a very weak induction current, subliminal for cortical stimulation, and

simultaneously stimulated the corresponding region of the other hemisphere with a "minimum current" (just above the threshold for cortical stimulation). There was no immediate increase in the activity of the other hemisphere; only after a certain time did the phenomenon of dynamogenesis appear. In another series of 26 experiments the experimenter applied for 5 minutes on the motor area of the cerebral hemisphere a constant current of 1 milliampere, applying alternately the anode and the cathode. In this case the constant current produced in the cerebral cortex some electrotonic phenomena similar to those produced in the peripheral nerves, i.e., decrease of tonus at the anode, or anelectrotonus, and increase at the cathode, or catelectrotonus. In a third series (34 experiments) in order to vary the sensitivity, the author used a very weak constant current applied for a prolonged period to one hemisphere, while at the same time he applied an induction current to the corresponding region of the other hemisphere, first with the anode, then with the cathode. Catelectrotonus produced by a weak constant galvanic current produces an influence on the opposite hemisphere only after a long period of stimulation—by summation. Anelectrotonus exerts an inhibitory effect on the activity produced by the application of the induction current to the other cerebral hemisphere.—*Math. H. Piéron* (Sorbonne).

[See also abstracts 1500, 1555, 1561, 1575.]

MOTOR PHENOMENA AND ACTION

1492. **De Saussure, B.** *Évolution de la notion d'instinct.* (Evolution of the concept of instinct.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique*, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 90-129.—The author looks at some problems which are the outcome of this concept: (1) Instinct and heredity: theses of Newland, Brun, Lloyd Morgan, Wells, Larguier des Banceles, W. James, and Swindle. (2) Instinct and intelligence: theses of Darwin, Weismann, Myers, Jung, Rivers, McDougall, and Adrian. (3) Instinct and the unconscious: theses of Rivers, Myers, Jung, Wallace, Drever, and McDougall. (4) Instinct and emotion. (5) The opponents of instinct: theses of Condillac, Carl Vogt, Buchner, Bacon, Wallace, Kuo, Kantor, Geiger, and Dunlap. (6) Classification of human instincts: theses of Curtis, Freud, Thorndike, Hunter, Warren, and Drever. (7) Definition of instincts: definitions by Larguier des Banceles, Brun, Watson, Lippincott, Jung, Driesch, Claparède, Goodrich, Drever, Reid, Dahl, and Bernard. The author agrees with Freud's formula, which he enlarges, defining instinct as "an activity disconnected by an inner or outer stimulus, either continued or periodic, but always specific, producing specific enjoyment if adequately responded to." No bibliography.—*Math. H. Piéron* (Sorbonne).

1493. **Goldberg, A. F., & Lepskaia, M. V.** *Les altérations des globules blancs au cours du travail physique et intellectuel.* (Alterations in the leucocytes during physical and mental work.) *J. de physiol.*, 1926, 24, 713-724.—A study of the changes of the leucocyte formula during the actual course of work. Examination of over 300 cases. During physical and mental work the appearance of neutrophilia can be observed, which might affect 82% of the number of leucocytes. Leucocytosis noticed in the course of physical and mental work is the main result of an auto-intoxication through alteration of the metabolism and through the irritating action of decomposition products upon the hematopoietic organs. This irritation is stronger during mental than during manual work.—*Math. H. Piéron* (Sorbonne).

1494. Lahy, J. M., & Weinberg, D. Les courbes de fréquence des temps de réaction dans les cas de troubles neuro-psychiatriques et chez les normaux. (The frequency curves for reaction time in cases of neuro-psychiatric disturbances and in normal individuals.) *Prophyl. ment.*, 1926, 2, 207-215.—Comparison of frequency curves of the reaction times of conductors of motor vehicles (1200 subjects) and of certain patients in the mental prophylaxis division of the Rousselle Hospital. The reactions under observation were auditory ones. The authors divide their frequency-curves into 4 groups: (1) regular curves with a single mode; (2) curves with 2 or more modes; (3) curves with several unequal peaks, values whose frequencies reach 8/10 of the mode and are separated from it by an interval; (4) forms deviating widely from the normal curve. The frequency curves of the patients are regular in 9% of the cases; of the workmen (skilled and unskilled), in 71% of the cases. These cases may be divided into 76% of regular curves in the workmen said to be skilled, and 55% in the unskilled. There is, then, a difference of 21% between the 2 groups—a significant figure, since the probable error is only 4.25%.—*Math. H. Piéron* (Sorbonne).

1495. Leise, O. Beitrag zur Theorie des kalorischen Nystagmus. (Aus der Universitätsklinik von Prof. Zimmermann in Kiel). (A contribution to the theory of caloric nystagmus. From the University Clinic at Kiel, Prof. Zimmermann.) *Arch. f. Ohrenk.*, 1926, 116, 1-9.—The post mortem investigations made by Dohlmann and Frenzel regarding the conditions for heat conduction through the parietal bone, though intrinsically important, cannot yield a final decision as to the possibility of explaining caloric nystagmus purely physically through a direct influence on the current in the semicircular canals of the labyrinth (Bárány), because of the special conditions prevailing in the living and blood-fed tissue. The author attempted a cooling of the smallest possible area by means of cotton wicks moistened with faucet water of 10°-12° C. and then squeezed dry, covering an area of about 3 sq. mm. A stimulation of 5-10 sec. induced the nystagmus (which was carefully determined, by means of Bartel's spectacles, to be true vestibular nystagmus) more readily, when the cotton was placed upon the rear upper aural wall, than when it affected the tympanum (the reaction times yielded no particular clues and seemed to vary with the excitability of the labyrinth). The author regards the physical explanation as justified, because a reflex change in vascular tonus could be expected to be strongest in the tympanum, which is well supplied with vessels and nerves.—*W. Wirth* (Leipzig).

1496. Leise, O. Experimentelle Untersuchungen zur Theorie der thermischen Vestibularreizung. (Aus der Universitätsklinik von Prof. Zimmermann in Kiel.) (An experimental investigation regarding the theory of thermal vestibular irritation. From the University Clinic at Kiel, Prof. Zimmermann.) *Arch. f. Ohrenk.*, 1926, 116, 56-67.—According to the foregoing investigation, Bárány's explanation of labyrinth stimulation, in the special form given it by Frenzel, appears to be correct; according to this theory, the bony structures of the upper rear portion of the aural passage mediate the cooling by purely physical means. The sinking of the cooled endolymph produces the current which causes the nystagmus. According to Leise, a slight decrease in temperature produces only horizontal nystagmus, the rotary type being the result of a current induced in the vertical canals by a continuation of that in the horizontal; except in the cases of very low temperatures, whereby the vertical canal itself may be directly affected. Furthermore, the author discovered that the compensation for the cooling-effect by means of a relative inclination of the semicircular canal, noted by Hofer after a so-called "radical operation," can be observed also in normal cases, in agreement with the theory of Frenzel and Bárány. One needs only to incline the head, while lying on the side, some 30°

toward the lower shoulder, whereby that point in the horizontal semicircular canal of the lower side of the head which is in contact with the conducting bridge of bone assumes the lowest possible position, so that no further sinking of the endolymph is possible. Or the head may be turned 30° toward the upper shoulder, whereby the critical point of the other horizontal semicircular canal reaches its highest possible position, so that the resultant sinking of the endolymph in both directions allows no further current, according to the scheme of Frenzel and Bárány. In both positions there was actually only rotary nystagmus to be found, upon very strong cold stimulation, whereas erection of the head immediately induced the horizontal as well. This compensation is not explicable in terms of vascular stimulation.—*W. Wirth* (Leipzig).

1497. **Noyons, A. K.** *The differential calorimeter and the determination of human basal metabolism.* Louvain: René Fonteyn, 1927. Pp. 189.—The problem of the measurement of the heat output (direct calorimetry) of the living organism is considered historically and practically. The advantage is claimed for direct calorimetry as compared with indirect calorimetry (the determination of O_2 consumed and sometimes of CO_2 produced) that the person measured is less disturbed, for it is not necessary to connect mask or tubes of any kind with his mouth or nostrils or to restrain or fix the position of the head. Calorimeters that have been described for use with man as a rule have such large mass, and hence are so slow to come into heat equilibrium, that they indicate with more or less accuracy only the average heat output values over fairly long periods of time. They are not able to indicate the production from moment to moment. The determination of minimum values associated with periods of absolute repose are probably too high, and the activity values are too low, as neither repose nor activity can be held constant. The differential calorimeter is the practical answer to these difficulties and Noyons, who is director of the Physiological Institute of the University of Louvain, devotes most of his book to a description of the excellent instrument which he has built. It was in working order several years ago and was first described before the International Congress of Physiology held in Paris in 1920. It is composed of two chambers of identical size and construction surrounded with a series of sheaths and separated by a central corridor .82 cm. wide. An electrical heating unit in one compartment is adjusted momentarily to compensate the heat given off by the man placed in the other compartment. The apparatus reacts almost immediately; the latent period is about 10 seconds and the sensitivity approximately .01 calorie in 2 seconds. The heat output produced by a single lift of the forearm to a height of 15 cm. can be measured. A curve is given, Fig. 34, showing the influence of sleep on the heat output. On falling asleep there was a progressive drop over a period of 7 minutes (11 determinations were made within that time) to a level 17% lower than the previous one. This low level held constant for 4 minutes, when the subject was awakened. It required about 5 minutes (7 determinations) for the waking level to be resumed, but it was resumed very exactly. This calorimeter is especially suitable for measuring the metabolism of man in normal and pathological states and it would appear to be the most ideal instrument yet described for studying the influence of mental work and emotional states.—*W. R. Miles* (Stanford).

1498. **Ohm, —.** *Zur Augenzitternkunde.* (Study on nystagmus.) *Arch. f. Ophth.*, 1927, 118, 103–117.—The author has noted the posture of the eye, by means of a nystagmograph, in the case of two patients with separation of the retina and four partially cured cases of miners suffering from miners' nystagmus during observation of a rotating disc, and immediately afterward in total darkness. The process in one case was a fairly plain pendulum motion of the eye, of greater magnitude and lower velocity than the nystagmus, and is explained

through a peculiar pendulum motion of certain excited ganglia. This motion has as a rule a different amplitude and frequency in different ganglia, the interference of which also explains the jerks contrary to the direction of the original rotary direction. The apparent contrary motion observed after the passage of a railroad train, according to Javal, corresponds to the slow similarly directed after-motion which has its undisturbed effect especially in darkness. A new contribution is awaited.—W. Wirth (Leipzig).

1499. Voss, H. E. Über weibliche Sexualhormone (Thelytropine). XIV. Beiträge zur Physiologie der vaginalen Brunstvorgänge des Meerschweinchens. (On female sexual hormones (thelytropine). XIV. Contributions to the physiology of occurrences of vaginal heat in the guinea pig.) *Pflüg. Arch. f. d. ges. Physiol.*, 1927, **216**, 156–180.—The frequency and length of periods of heat in the guinea pig are less regular than has been supposed. The interval between peaks of heat may vary from 13 to 20 days; the interval between cessation of one period and beginning of the next varies between 9 and 16 days. There appears to be a certain relation between the length of the inter-oestral period and the intensity of the succeeding period of heat. The validity of the vaginal smear method of investigation is attested. In castrated females the vaginal smear method shows the typical inter-oestral relationships of the normal female.—L. T. Spencer (Yale).

[See also abstracts 1461, 1466, 1490, 1505, 1556, 1564.]

PLANT AND ANIMAL BEHAVIOR

1500. Coupin, —. L'indice de valeur cérébrale au cours de l'enfance chez les anthropoïdes. (The cerebral weight index during infancy among the anthropoids.) *C. r. Acad. sci.*, 1927, **184**, 396–398.—Comparing the weight of an animal's brain at a given stage of its development with that of an adult supposedly reduced to the stature corresponding to this stage, we obtain an index of cerebral weight. The author finds that in man and the anthropoid apes this index rises above 1.00 during a certain period of infancy. The maxima arrange themselves in the following order: gorilla, orang-utang, chimpanzee, man. It is, therefore, in the human species that the superiority of the child over the adult is least marked. This superiority becomes more marked in intellectually less developed species.—Math. H. Piéron (Sorbonne).

1501. Hubbard, R. M. The stimulus for the visual discrimination habit. *J. Comp. Psychol.*, 1927, **7**, 75–81.—By a problem box technique which required that an albino rat learn to reach its food in response to a lighted circle in a glass plate, and that another rat learn to reach its food in response to a lighted hole in the glass plate by going through the hole itself, it was demonstrated that rats learn more quickly and more easily to make 30 consecutive errorless runs to food in the latter case than in the former. Four possible explanations of the fact are presented: (1) The empty hole, in the second type of technique, by having the glass removed, allows more light to reach the animal, hence the greater effectiveness of the brighter stimulus; but this added amount of light cannot amount to more than 8% of the original amount through the glass and former experiments have shown that 100% of increase would be necessary. (2) The open hole, passed through, is more frequently followed by success in attaining food than is the circle of light alone which is looked at. (3) The hole may allow heat to reach the animal, while the glass plate with its circular transmission of light may prevent the stimulation by heat; other stimuli, such as tactual ones and kinesthetic ones, may also be operative; further experiments are necessary to settle

this point. (4) Perhaps the *Gestalt* explanation is applicable: the animal reacts to the total situation of many stimuli in relation, hole, light, and alley-ways; and in reacting makes a pattern of movements, the one involving doing some act with respect to the hole making that stimulus more meaningful to the animal than the mere seeing of a circle of light. One figure and three tables of results.—*H. R. Crosland* (Oregon).

[See also abstracts 1458, 1499, 1505.]

EVOLUTION AND HEREDITY

1502. [Anon.] **Differential birth rate. Distribution of intelligence among children and adults.** *Eug. Rev.*, 1927, 18, 336-337.—Gives figures for the increase of eight social classes from 1901 to 1911 in terms of percentages of the gross increase for the country. Upper and middle classes show the smallest increase; miners and agricultural laborers the largest. The distributions in per cents of London children and London adult males in categories of intelligence (children) and of occupational status (adults) are tabled from data based upon Burt's work.—*B. S. Burks* (Stanford).

1503. **Commins, W. D. The intelligence of the later born.** *School & Soc.*, 1927, 25, 488-489.—The I.Q.'s of 142 pairs of siblings chosen from school grades 3 to 8 were obtained by means of the McCall Multi-Mental Test. In 99 cases the younger member of the pair had the higher I.Q.; in 43 cases, the older, the average difference between the sibs being 17 and 10.3 points, respectively, in these two groups. The interpretation is offered that the McCall test is probably so constructed that the I.Q. tends to decrease with age. The author does feel, however, in the light of the agreement of his results with those of Miss Arthur, that the thesis that the younger children in a family are the brighter need not be abandoned.—*H. L. Koch* (Texas).

1504. **Fleming, R. M. Anthropological studies of children.** *Eug. Rev.*, 1927, 18, 294-301.—Part I reports repeated measurements of cephalic index on the same children for periods of 6, 7, and 8 years. Part II reports anthropological observations (but not measurements) upon groups of half-caste children of Anglo-Chinese and Anglo-Negro parentage in seaport towns. Also offers comments based upon observations of mental characteristics of these children. In the Anglo-Chinese group: (1) "No cases of mental or moral deficiency or 'anti-social' tendencies were recorded." (2) "Several cases of exceptional literary or artistic talent were recorded, one of marked musical ability." (3) "Even the older children seemed frank and free from consciousness of social stigma, but the parents (both English and Chinese) seemed very bitter on this point." In the Anglo-Negro group: "14 per cent of . . . the children were recorded as mentally deficient, but in each of these cases the mental deficiency was proved to be hereditary from the English mother's side." Size of groups in Part II not definitely stated, but is said by author to be small.—*B. S. Burks* (Stanford).

1505. **Hobhouse, L. T. Mind in evolution.** (3rd Ed.) New York: Macmillan, 1926. Pp. xix + 483. \$4.25.—The new material in this edition consists of two short appendices dealing with *Gestalt* and *instinct* respectively. In the discussion of the former topic, chief use is made of Koffka's "Growth of the mind." Hobhouse perfers his own term "correlation," as developed in connection with orthogenetic evolution, to the term "*Gestalt*." In the discussion of instinct, the author takes account of the recent critical attitude toward that concept. He does not, however, give up instincts. The term should not be applied to drives executed with full foresight, to tendencies which are undefined by

heredity, or to conative and emotional systems "which arise out of the impact of our experience upon our impulses and needs." "The word should be kept to designate autonomous systems originating and directing action not without conscious process but independently of rational will."—*W. S. Hunter* (Clark).

1506. **Oldberg, O.** *Das Geschlecht der Mediceer in rassenhygienischer Bedeutung.* (The Medici family from the point of view of racial hygiene.) *Arch. f. Rassen- u. Gesellsch.-biol.*, 1926, **18**, 407-426.—This essay is essentially a restatement of the results of Gaetano Pieraccini's great work, "La Stirpe de Medici di Cafaggiolo," published by Vallecchi in Florence, 1926. It deals with twelve generations, 1360-1743. Measurements of the skeletons were prevented by the authorities. The general family traits are: tremendous vital energy, love of pleasure and of life, supernormal intelligence, physical beauty and fecundity, but early senility, especially in the men, arthritic diathesis (gout), macrosplanchnic figure (a concept of the school of de Giovanni, related to the athletic type of Kretschmer). Tuberculosis, twice introduced by marriage, could not gain a foothold, yet the family broke up by reason of unwise marital combinations, motivated by dynastic considerations.—*W. Wirth* (Leipzig).

[See also abstracts 1482, 1590, 1593.]

SPECIAL MENTAL CONDITIONS

1507. **Allendy, R.** *Les présages au point de vue psychanalytique.* (Omens from the psychoanalytical point of view.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique*, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 228-244.—An omen is an external fact awaking a dominating idea of a yet unknown event. Between the intimating fact and the intimated idea there is no rational causality-connection; there is only a symbolic relation, and the intimated idea is accepted as an inescapable and definite certainty. The study of omens may be fruitful for the psychoanalyst; it may clear up the problem of human destiny, showing whether the latter proceeds from the external world or whether it is only a subjective determination. As between those who are resigned because everything is determined and those who hold that everyone shapes his life according to his will, psychoanalysis might show—according to the author—that conscious will is ineffective against destiny, but that unconscious but strong will may prove all-powerful. The latter would at the same time furnish the means of willing on this plane (of existence), and would fulfill the Buddhist ideal of knowledge liberating man from fatality.—*Math. H. Piéron* (Sorbonne).

1508. **Cruchet, R.** *Les erreurs et les dangers du Freudisme.* (The errors and dangers of Freudism.) *Presse méd.*, 1927, **35**, 257-259.—The author asserts that the Freudian teaching is nothing more than an imaginative monstrosity based on a monumental error. The error consists in making this doctrine dependent on systematized infantile sexuality, which does not exist generally. Freud reasons about the child with the mind of an adult, going so far as to admit that with an adult sexuality is a constant rule in the accomplishments of acts of his normal psychological life. The author adds that, practically, psychoanalysis is an incomplete and dangerous curative agent; that in investigating only emotional sexual traumas it often creates the traumas it seeks to heal, thus aggravating the initial condition. On the other hand, he finds that intelligent psychotherapy is superior to psychoanalysis, because it considers all causes without subordinating one to the others.—*Math. H. Piéron* (Sorbonne).

1509. **Fiessinger, C.** *L'habitude dans les symptômes morbides.* (Habit in morbid symptoms.) *Bull. Acad. méd.*, 1927, **97**, 147-150.—Habit, in the mental economy, is a kind of stabilization of thought and action. This stabilization reappears in the pathological stage, especially in symptoms strongly controlled by will (e.g., coughing, constipation). The physician must try to eradicate the psychic habit by inducing reactions which are primarily emotional.—*Math. H. Piéron* (Sorbonne).

1510. **Flournoy, H.** *Délire systématisé de persécution.* (Systematised delusions of persecution.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique*, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 1-27.—A patient, 66 years old, believes herself constantly pursued by a physician who had previously attended her. After a short analysis she explains her feelings as due to a transfer. She declares that her daughter-in-law has guilty relations with her supposed pursuer, and that at the moment when both are in intimate intercourse she feels disturbances. This second delusion, a kind of defensive reaction against the first, thus ranks second in the primitive system, love-pursuit, whose origin proceeds directly from the rejected psycho-sexual complex. A cure was effected by psychotherapeutic treatment in 60 sittings. It was a cure from the social point of view, since the patient resumed an adjustment exactly similar to that which she had had before; but it was not so technically because she lacked complete retrospective comprehension of her case; she does not any more believe in it, but does not disavow it. The author believes that what has made the psychological treatment successful is that he has secured from his patient, together with her confidence, a new affective transfer to himself, and that he was able to detach this affective transfer from its morbid elements so that it grew into pure and simple confidence.—*Math. H. Piéron* (Sorbonne).

1511. **Leroy, E. B.** *Les visions du demi-sommeil (hallucinations hypnagogiques).* (The visions of half-sleep: hypnagogic hallucinations.) Paris: Alcan (Bibliothèque de philosophie contemporaine), 1926. Pp. 132.—In the waking state and during complete darkness, the field of vision is neither black nor uniform; it is filled with vague and uncertain images which to our knowledge do not correspond to anything external, but which we cannot confuse either with memories or with creations of our fancy. In the same way we do not pass directly from waking to sleeping without having also in this period of half-sleep very vivid visions, pretty closely related to hallucinations, but which are never valued as perceptions. It may happen that these images reappear at the moment of awakening, accompanied by auditory images. These Baillarger called "fantastic images;" they are now known as "hypnagogic hallucinations." The author cites 39 instances of these observed images from his own experience and that of educated and trustworthy observers. These images appear to lack reality; they do not appear as personal creations, nor as memories. They do not involve acts, as do hallucinations, but are sometimes followed by movements of adaptation. The subject in the hypnagogic state behaves as if confronted by some spectacle, something which, real or not, does not concern him; and this differentiates this state from that of dreams, in which the subject is interested and active. A bibliography of 26 titles at the end of the volume.—*Math. H. Piéron* (Sorbonne).

1512. **Loewenstein, R.** *Le transfert affectif. Remarques sur la technique psychanalytique.* (Affective transfer. Remarks on psychoanalytic technique.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique*, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 75-90.—Hysterical symptoms are linked by a chain of thought-associations to some events in the patient's life which have disappeared from his memory. Owing to free associations with

which Freud filled up the memory-gap, the symptoms disappeared. But the patients, instead of helping to recover the memory of forgotten events, are raising difficulties which reveal a struggle between their "ego" and the desires which had accompanied these events. The struggle had already taken place when these desires appeared and repelled the events in question. This conflict is reflected during treatment on the plane of the transfer. In approaching certain strata of the unconscious the psychoanalyst detaches certain affective states, which then are transferred to himself. The patient is assuming towards him the same attitude he assumed towards others. It is then the task of the psychoanalyst to force the patient to recall, so that he does not reassume his former attitude, and faces reality instead of escaping from it into fictions of the unconscious.—*Math. H. Piéron* (Sorbonne).

1513. **Pichon, E.** *De l'extension légitime du domaine de la psychanalyse.* (The legitimate extent of the field of psychoanalysis.) *L'évolution psychiatrique, Psychanalyse.* Psychologie clinique, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 208–228.—Psychoanalysis should have henceforth, according to the author, the freedom of the city, being concerned neither with ethical, religious, nor esthetic problems. Moreover, the criticism by certain physicians that it is trying to cure diseases of purely physiological origin is unfounded. The psychogenic-therapeutic method and medicinal treatment are not in opposition. It is quite possible to utilize together these two methods, which are capable of reciprocal reaction.—*Math. H. Piéron* (Sorbonne).

[See also abstracts 1499, 1522, 1528, 1543, 1546, 1551, 1557, 1573, 1575, 1622.]

NERVOUS AND MENTAL DISORDERS

1514. [Anon.] **Vagotonic and vasomotor types of complex sympathoses.** *J. Organotherapie.*, 1927, 11, 7–ff. (Trans. from M. Laignel-Lavastine, *Paris Méd.*, 1924, 14, 593.)—By sympathoses, the author means the generalized sympathetic syndromes. These are the association of several more or less generalized simple sympathoses. Clinical descriptions are given of the two; the vagotonic and the sympathetic or vasomotor types. A historical sketch of the origin of the classification is given, and a description of physical and psychical states that accompany the syndromes. The author gives a criticism of the two types, in which he attempts to justify the separation of cases into them. The article concludes with a section on the usefulness of the vagotonic criterion in the classing of sympathoses. In this section he takes up problems of diagnosis.—*J. R. Liggett* (Clark).

1515. **Antoni, N.** *Svenska föreningens för invärtes medicin förhandlingar.* (Report from a meeting of the Swedish society for internal medicine.) *Svenska Läkartidn.*, 1927, 24, 280–288.—A case of a man of 52 years, reported by Dr. Grönberg under the title: "A case of Vaquez' illness with hemianopsia." The patient was a genuine polyglobulin type, manifesting extraordinary disturbances of vision. He suddenly found himself totally blind one morning. After 3 days he could distinguish light from darkness. Subsequently he could recognize colors, objects and persons. His sight improved gradually, but never to such an extent that he could read. Two months after he went blind he had the sensation of red, centrally only, and that of green within a small area of the macular zone exclusively. Graphic illustrations of the disturbance of his field of vision from successive periods are appended. Diagnosis: "bilateral upper quadrant hemianopsia," a malady discovered during the World War from wounds in the occipital lobes.—*M. L. Reymert* (Wittenberg).

1516. Auden, G. A. *The madness of Ajax*. *J. Ment. Sci.*, 1926, **72**, 503-512.—A study in the light of modern psychiatry of the madness of Ajax, the Trojan warrior, as depicted by the tragedian, Sophocles. From a clinical point of view the picture of the suffering hero is drawn with clearness and insight and with amazingly accurate details. The description throughout the drama is one true to clinical experience, with the rapidly varying emotional states, the persecutory ideas, the hallucinatory phase with complete disorientation, the maniacal outburst followed by a depression which culminated in suicide; and the account might easily compare with that of acute confusional insanity in any modern textbook on psychiatry. A still further point of interest in the drama is the question of criminal responsibility which Sophocles apparently had in mind, and probably an Athenian jury would have felt the significance of Ajax's mental state at the time of his destructive acts and judged him accordingly.—E. F. Symmes (Yale).

1517. Balduzzi, O. *Die Tumoren des Corpus Callosum; anatomisch-klinischer Beitrag*. (The tumors of the corpus callosum; an anatomical-clinical contribution.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, **79**, 1-82.—Of all cerebral tumors, those of the corpus callosum are the most difficult to diagnose. The author offers casuistics on all the 113 cases so far observed (with exception of four cases of incidental findings during autopsy) tabulated under eleven groups of symptoms, and adds to these the detailed medical histories and autopsy findings of three original cases. Ataxia does not appear to have the symptomatic significance attached to it by Zingerle, Liepmann and others (only nine pure cases). On the other hand, cases without any psychic disturbances are very rare (only ten negative instances, including the second original case). It is true that a characteristic psychic symptom is very hard to determine, the best chance being in case of an early diagnosis. Following Raymond, the author cites an initial condition of depression, dissociation of ideas, idiosyncrasies of behavior, gaps in memory, especially in regard to very recent events, serious mutations of character, appearing very early. Furthermore, a certain diagnostic importance is attached to the determination of apraxis of the facial and lingual muscles, and of the extremities of the left side or even of both sides, motor inhibitions on both sides, absence of any disturbance of the cerebral nerves, especially the oculomotor nerves, and the appearance of dysarthria. Unfailing symptoms for an exact localization in the various sections of the corpus callosum are not available. But the syndromes here enumerated offer certain bases for the difficult differential diagnosis regarding other cerebral tumors in the frontal, parietal and temporal lobes, parts which are usually affected ultimately by tumors in the corpus callosum (usually glioma), just as tumors generated in the lobes tend to extend into the depth of the callosal radiations. The dementia often has caused such cases to be falsely diagnosed as paralysis.—W. Wirth (Leipzig).

1518. Bond, E. D. *A mental hospital in the "fabulous forties."* *Amer. J. Psychiat.*, 1925, **4**, 527-536.—A description of a hospital for the insane is set forth most completely. How the patients spent their time, the interest which physicians took in them, why they were committed, and the treatment they received make up the bulk of the article. Of particular interest are the methods of occupational therapy used at that time, which seem far in advance of any practice in this line today.—G. Stowell (Boston Psychopathic Hospital).

1519. Brouwer, B., & Oljenick, I. *Lipiodol-test in tumors of the spinal cord*. *Acta Psychiat. et Neur.*, 1926, **1**, 15-38.—Following a short historical account, the writer gives his own detailed observations. The case-histories contain much of interest in regard to disturbances of sensibility and reflexes caused by tumors of the spinal cord. Bibliography.—M. L. Reymert (Wittenberg).

1520. **Bürger, H.** *Zur Frage der "Crampusneurose."* (A study of the "cramp-neurosis.") *Arch. f. Psychiat. u. Nervenkr.*, 1926, **79**, 150-169.—(From the psychiatric clinic at Heidelberg, Prof. Wilmans.) The patient, Knecht, who is the subject of this study, was born in 1888; his illness, which is now of twenty-three years' standing, has grown more severe in recent years. It cannot be attributed to any local tumor, but by reason of the progressive dementia must be regarded as a diffuse degeneration of the brain, the precise nature of which remains completely unknown. The convulsions are brought on by any considerable excitement, and rise in explosive fashion to boundless fury. One constant symptom is the tendency to cramps in the legs. His ataxia, which (in distinction from cerebellar ataxia) always possesses the whole body and causes him to fall over backwards without any optical control, would indicate, like all his other symptoms, that the seat of the trouble is in the medulla and thalamus; a theory which Förster and Lotmar have already suggested for the cramp-neurosis.—*W. Wirth* (Leipzig).

1521. **Burke, N. H. M.** *Some aspects of the inter-relations between bodily and mental disease.* *Brit. J. Med. Psychol.*, 1926, **6**, 110-120.—The problems of functional and structural inter-relationships are considered in the light of the work of the psychiatrist. A number of significant cases are cited. The problem of faulty diagnosis and treatment and the inter-relation of function and structure in connection with these errors is considered. For example, in regard to gastro-intestinal conditions, the author states that there is nothing in theory or in clinical experience to render fanciful the suggestion that a severe mental strain, through the emotional crisis involved, or an anxiety state, with chronic stimulation of the emotion mechanism, may produce atony, ptosis, disordered secretion and even ulceration in the intestinal tract, and so lead to a physical disease that is a result of the mental. His conclusions are, first, that a thorough physical examination should be given to all patients suffering from mental ills, and second, that the psychotherapist should remember the fact that it is possible that physical symptoms develop as a result of mental conditions.—*N. Fenton* (Ohio).

1522. **Burrow, T.** *The need of an analytic psychiatry.* *Amer. J. Psychiat.*, 1927, **6**, 485-497.—In the sphere of the mental sciences we have yet to secure the criteria of observation requisite to sound scientific judgment; we have not yet discovered and formulated the laws upon which an accurate technique of judgment necessarily rests. The methods of psychiatry and psychoanalysis are quite opposed, yet they have both contributed material of far-reaching significance. The contributions of both will be limited until they have become united and include the study of the social mind plus the phenomena of the individual unconscious. Psychiatry has observed one canon of scientific evaluation, a consensus of observers, and psychoanalysis has observed another, the presentation of the actual material to be observed. When we establish in the mental field the same conscious law that operates within the objective sciences, there will follow a combination of the broad sociological discipline of psychiatry with the more restricted intensive research of the individualistic analysis, and the possibility of a scientifically controlled investigation into human life.—*B. Kendall* (Boston Psychopathic Hospital).

1523. **Capgras, J.** *Crimes et délires passionnels.* (Crimes and delusions of passion.) *Ann. méd.-psychol.*, 1927, **85**, 32-47.—The mental integrity of paranoiacs who commit criminal acts is a decided factor in their medico-legal disposition. Paranoiacs who, for example, show criminal satisfaction in their deeds of violence are considered sane and sentenced to death, others are set at liberty if their crime appears to be justified—even when the alienist points out definite

psychotic features in their make-up. The article contains detailed case studies illustrating medico-legal problems of various forms of paranoia. Should mild paranoiacs be sent to prison or to a hospital? Should the criminal insane ever be released from institutions? Ought the law to recognize erotomania as a form of mental aberration similar to drunkenness or feeble-mindedness? In the author's experience, if an act of passion, such as hatred, revenge, jealousy, be reasonable enough, it is difficult to make the non-psychiatrically trained individual recognize the presence of a mental disease which is apparent to the alienist.—*N. Fenton (Ohio)*.

1524. **Carroll, R. S., Barr, E. S., & Barry, R. G.** Aseptic meningitis in the treatment of dementia praecox. *Amer. J. Psychiat.*, 1924, 4, 673-703.—“It has often been observed that improvement sometimes occurs in dementia praecox cases during the leucocytosis of infectious processes.” And it has also been demonstrated “that the injection of serum into the spinal canal of cats produces an acute exudative, aseptic meningitis.” Dr. Carroll evolved a theory that possibly dementia praecox might prove a food-chemico-deprivation rather than a toxic destructive process. In one case after the injection of horse serum by lumbar puncture aseptic meningitis resulted and after a second treatment the patient became quite himself. Based on this and further observations the authors carried on a series of experiments which showed the following results: “1. The injections of sterile inactivated horse serum into the spinal canal produces an aseptic meningitis with marked physical reactions. 2. That the mental condition of 66 per cent of cases of dementia praecox so treated shows improvement which has lasted from 2 to 11 months, several enjoying remissions. Insight is often gained. 3. That a fundamental principle not yet fully determined is involved, the further investigation of which may throw much light on the etiology of dementia praecox.”—*G. Stowell (Boston Psychopathic Hospital)*.

1525. **Chapman, R. McC.** Occupational therapy from the standpoint of the private mental hospital. *Occup. Therap. & Rehab.*, 1927, 6, 113-123.—The problems in such cases are usually not solved at once. The difficulty often results from conflicts of long duration, and careful analysis is needed. The possibility of recovery is greatly facilitated by the patient's wish to get well. In a small hospital there is very little mass application of therapy, aside from entertainment or athletic work. The aides should make effort to give the patients something to do besides think of themselves and encourage them in making better adjustments. Some psychiatrists feel that even the dementia praecox case, if there is still ability to develop an interest in another person, is not hopeless. Unwise treatment often aggravates conditions. Mental conflicts, for instance, may be still further aroused by the aides' failing to maintain a professional attitude. Cases of depression are sometimes aggravated by insisting that the patient work faster or do some particular job which he dislikes. Case studies illustrate how improvement appears as the patient develops an interest in some occupation. The therapist must avoid sacrificing treatment to the production of beautiful or useful things. From the therapeutic standpoint it is a greater triumph to develop in a catatonic patient an interest in folding paper a certain way than to encourage production of beautiful woven fabrics by a chronically paranoid individual. The aide must avoid stressing craftsmanship at the expense of therapy.—*H. E. Burt (Ohio State)*.

1526. **Conrick, W.** Organizing an occupational therapy department in a children's hospital. *Occup. Therap. & Rehab.*, 1927, 6, 23-29.—Such an organization should begin with a flexible program, the only thing that is absolutely essential being a prescription on every case. It proved feasible to conduct bedside therapy in the morning while the school teacher conducted classes in grade

work in the school rooms. In the afternoon the ward academic work was conducted while occupational therapy for the older ambulatory cases was carried on.—*H. E. Burt* (Ohio State).

1527. **Courbon, P.** *Saint Francois d'Assise et la psychiatrie.* (St. Francis of Assisi and psychiatry.) *Ann. méd.-psychol.*, 1927, 85, 5-31.—This study is interesting, though not especially objective and scientific. The author points out the difficulty of what he attempts, because of the lack of knowledge of contemporary civilization, inadequacy of historical method, lack of conformity among biographers, etc. He stresses the need to make analysis from the standpoint of the contributions, both literary and institutional, which St. Francis has made. The author discusses monastic orders and life therein during the early and later Middle Ages and goes into more detail regarding the three kinds of orders grounded by St. Francis. The author states that St. Francis was of mediocre intelligence and had little education; he finds facts in St. Francis' youth suggestive of exhibitionism, but explains them as really indicative of sexual anaesthesia; he very emphatically repudiates Freudian techniques; he notes occurrence of doubts and inferiority tendencies; he explains the occurrence of visual and auditory hallucinations as occasioned by his strong *imagination representative*. The production of stigmata and other dermatographic phenomena are explained as hypersensitive vasomotor reactions. As proof of the latter, he cites the case of a schoolgirl who had a badly inflamed breast without any organic cause, which appeared the day after being highly emotional at seeing her teacher have a hemorrhage in the breast region in the presence of the class. The values of St. Francis to psychiatry are summarized as showing: (1) the futility of rigid classification; (2) the existence of mysticism without eroticism in some individuals; (3) the separation of sexual feeling and love of nature; (4) the import of intuition in influencing human behavior (St. Francis being a case where intuition was greater than intelligence); (5) emphasis upon individual difference, a part of his psychological system evident in the organization of his religious orders; (6) the influence of joy upon mental and spiritual health as recognized by St. Francis, who advised his followers to be joyous; (7) the superiority of observation over theory, which the author thinks is demonstrated by the life-work and accomplishments of St. Francis.—*N. Fenton* (Ohio).

1528. **Donath, J.** *Verhütbare und heilbare Seelenstörungen.* (Preventable and curable mental disturbances.) *Psychiat.-Neur. Woch.*, 1927, 29, 15.—(Festschr. f. G. Olah.) The author, by means of several hypnotic séances, has cured two psychopathic persons of states of fear and ideas of persecution until they were fully able to work again. He recommends psychotherapy quite generally for incipient paranoia.—*W. Wirth* (Leipzig).

1529. **Emery, M.** *Occupational therapy in an out-patient clinic for mental cases.* *Occup. Therap. & Rehab.*, 1927, 6, 155-160.—The out-patient class serves somewhat the same purpose as an observation ward. The physicians have an opportunity to watch the reactions of the patients to each other. The second advantage of such out-patient clinics is the social effect. The patients fit into a small group which has common interests and thus distinct therapeutic value.—*H. E. Burt* (Ohio State).

1530. **Emig, M. A.** *The establishment of occupational therapy clinics in coöperation with the State Department of Reëducation of Disabled Persons.* *Occup. Therap. & Rehab.*, 1927, 6, 149-153.—Occupational therapy is incomplete unless carried through to rehabilitation. It is necessary to study the individual's type and make a survey of his assets in the way of abilities. When patients learn of the therapist's interest in their welfare they will confide regarding their future plans. If the case is such that a return to the original occupation is impossible

the therapist must be ready with suggestions as to other available positions. A case is cited of a forestry engineer who lost a leg and could not follow his previous vocation, but became interested in plastic interior decorating, and finally became a member of a large architectural organization.—*H. E. Burt* (Ohio State).

1531. **Ferraro, A., & Fong, T. C. C.** The malaria treatment of general paresis. *J. Nerv. & Ment. Dis.*, 1927, 65, 225-229.—The success of previous treatment of general paresis by malaria is first summarized in a long table, and then the technique of the treatment is discussed. The authors find this treatment to result in good improvement in 53% of their cases. Very good remissions, or patients "socially recovered," amounted to 26% of the cases, incomplete remissions 27%, and 8% exhibited only slight improvement. The percentage of death risk was 4.9. The expansive-paranoid type showed the largest number of remissions, the depressive and manic types next, and the demented and schizoid types offered most resistance to the treatment. Younger patients responded better than older ones. Of the authors' cases, 24 out of 62 now have remissions of 3 years' duration. The serological changes during treatment and the neurological changes following treatment are discussed. A parallelism is found between the number of chills and the extent of the remission, which suggests that the fever temperature plays an important rôle in the disappearance of the spirochaetes. Bibliography of 4½ pages.—*O. W. Richards* (Boston Psychopathic Hospital).

1532. **Fischer, M.** Grenzen und Möglichkeiten der Encephalographie (an Hand von 18 fortlaufenden Fällen.) (Limits and possibilities of encephalography; supported by 18 consecutive cases.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, 79, 96-103.—(See also Abstract 1574.) According to Fischer, the encephalographic process, if it is carried out with due precaution in the selection of cases and the omission of liquor and air-inflation, can no longer be viewed with disfavor. At the same time he rejects the demand which has sometimes been voiced, for comparative encephalographic material from normal subjects, and expects a sufficiently unambiguous typology to develop through a systematic collection of morbid findings. He grants that encephalography can never become a substitute for painstaking and exact neurological research; but in connection with the latter it offers a wealth of suggestion, less perhaps for psychiatry than for pure theory. The cases are ranged under three headings: epilepsy, tumors, and organic cerebral processes with dementia praecox or syphilis. The most interesting discovery made by this method under the first group is a marked asymmetry of the central organ, which is reflected also in the bone structure and physiognomy of the patient. In the third group, a case of progressive paralysis shows surprising modifications, far surpassing all clinical symptoms, though these were sufficient for diagnosis; in this it is reminiscent of certain autopsy findings in rapidly developed cases.—*W. Wirth* (Leipzig).

1533. **Flournoy, H.** The biological point of view of Adolf Meyer in psychology and psychiatry. *Brit. J. Med. Psychol.*, 1926, 6, 86-92.—A brief account of a larger paper to appear in the *Archives de Psychologie*. (See Abstract 862.) The viewpoint which the author attributes to Meyer, his system of thought in the problems of psychopathology, is a generous and open-minded recognition of the usefulness of all contributions from psychologists, behaviorists and others, in meeting the problems of mind in disease. As the author states, "if Meyer's medical psychology gives the greatest importance to anatomy and physiology, it also makes the most of all the contributions which introspection yields." The article is written with the warm glow of a disciple.—*N. Fenton* (Ohio).

1534. **Flournoy, H.** La psychiatrie; sa place et son importance dans l'art médical. (Psychiatry; its place and importance in medicine.) *Rev. méd. de la Suisse romande*, 1927, 83-89.—During the last quarter-century psychology has

made great progress, enough to make possible a new and larger approach to psychiatry. Doctors can no longer ignore psychology, psychoanalysis, psychotechnics, etc.—*Ed. Claparède* (Geneva).

1535. **Foix, C., & Chavany, J. A.** *Diplégies faciales (facio-linguo-pharyngomasticatrices), d'origine corticale, avec quelques considérations sur les paralysies pseudo-bulbaires et la localisation des centres corticaux de l'extrémité céphalique.* (Facial diplegia of cortical origin with some considerations of pseudo-bulbar paralysis and the localization of cortical centers of the cephalic extremity). *Ann. de méd.*, 1926, 20, 480-498.—An analysis of the anatomical and clinical findings in cases of facial diplegia. This condition, which is marked clinically by paralysis of the muscles of mastication, is not as rare as has been supposed. There is loss of speech which was determined to be aphonic rather than aphasic. A bibliography containing twenty-two titles is appended.—*F. Fearing* (Ohio Wesleyan).

1536. **Garçon, M., & Vinchon, J.** *Le diable.* (The devil.) Paris: Gallimard (Les documents bleus, No. 29), 1926. Pp. 255.—The first part, by M. Garçon, is entirely historical. The second part, by J. Vinchon, contains very little of psychology (except in the chapter on belief during delusion) and treats almost entirely of psychiatry. No bibliography.—*Math. H. Piéron* (Sorbonne).

1537. **Goldstein, K.** *Über den Einfluss motorischer Störungen auf die Psyche.* (On the influence of motor disturbances on the mind.) *Allg. Zsch. f. Psychiat.*, 1925, 82, 164-177.—The author discusses an interesting case of probably progressive organic disease in the right cerebellum and in the striate bodies (detailed description *Zsch. f. d. ges. Neur. u. Psychiat.*, 1924, p. 407) and shows from his point of view the great significance of the cessation of motor processes for the general psychic condition ("blocking" of consciousness through abnormal motor symptoms.) Cf. also *Dtsch. Zsch. f. Nervenhk.*, 83, p. 119.—*Th. Ziehen* (Halle a/S.).

1538. **Goldstein, K.** *Das Wesen der amnestischen Aphasie.* (The nature of amnesic aphasia.) *Dtsch. Zsch. f. Nervenhk.*, 1925, 83, 324-339.—In connection with cases of amnesia for color names, the author attempts to show that complete symptoms of amnesic aphasia, the amnesic speech disturbance as well as the symptoms of the noted Lewandowsky case in reaction to colors and also the disturbances in color sorting, are to be traced back to a centralized basal disorder. This disorder consists of a "particular alteration of the total attitude which one can well designate in a fixed sense as an injury of conceptual performance". If, for example, the patients do not sort the colors properly, the author assumes that the ability to take the colors presented as representatives for red, blue, etc.—in general, to perceive them thus as representatives of a precise color category—is destroyed or injured. He speaks thus of a disturbance of the "categorical attitude". A complete statement follows in "*der Zeitschrift Psychologische Forschung*".—*Th. Ziehen* (Halle a/S.).

1539. **Guillain, G., Alajouanine, T., & Giro, L.** *Etude de certains mouvements involontaires observés au cours du tabes.* (Study of certain involuntary movements observed in the course of tabes). *Ann. de Méd.*, 1926, 20, 530-547.—Clinical studies of tabes are presented which are characterized by abnormal postures of the hands and feet, sensory disturbances and involuntary movements. These latter are of three types: (1) athetoid, non-rhythmical and observed in the extremities, (2) rhythmical tremors, and (3) clonic type, confined to face and tongue.—*F. Fearing* (Ohio Wesleyan).

1540. **Gunderson, P. G.** *Dynamic occupational therapy.* *Occup. Therap. & Rehab.*, 1927, 6, 131-135.—Stresses the need for extensive study of the individual case and adaptation of the treatment thereto. Various peculiarities of behavior

result from unconscious repressions and the healthy outlet in conscious activities seems beneficial to such patients.—*H. E. Burtt* (Ohio State).

1541. **Hajos, L.** *Die Religion als Behelf der Psychotherapie.* Religion as an aid to psychotherapy.) *Psychiat-Neur. Woch.*, 1927, **29**, 49.—(Festschr. f. G. Olah.) "Medical principles claim a serious consideration in religious life; the psychotherapeutic powers of religion deserve a more lively interest on the part of physicians." Especially in this time of nervousness as a consequence of the World War the physician and the clergyman, says the author, should cooperate closely.—*W. Wirth* (Leipzig).

1542. **Henderson, D. K., Thomson, A. G. W., Brodie, —, & Robertson, D.** *Occupational therapy.* *J. Ment. Sci.*, 1925, **71**, 59–80.—A series of papers, the first of which summarized the history of early beginnings of occupational therapy in Scotland, showing that over a hundred years ago some attempts were made with a gradual broadening of scope until the establishment of a department of occupational therapy in one of the prominent mental hospitals, ending with a plea for more recognition by psychiatrists of the part played by this type of therapy in mental cases. The second dealt with actual cases in which the physician felt that the contact with the occupational department was stimulating and of therapeutic value. The third emphasized the spirit of play needed in occupational work although practicality must from an economic point of view be the final test. Some recompense was recommended as creating self-respect. The fourth, from the viewpoint of the occupational instructor, pointed out the fact that crafts in addition to the ordinary routine type of work proved helpful to many patients. No stress is laid on occupational therapy as a training for future employment; although occasionally such training occurs, it is the therapeutic value of the work which is the chief aim.—*E. F. Symmes* (Boston Psychopathic Hospital).

1543. **Hesnard, A.** *Les applications de la psychanalyse à l'étude du mécanisme psychogénétique des psychoses délirantes chroniques.* (The applications of psychoanalysis to the study of the psychogenetic mechanism of the chronic delirium psychoses.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique.* Paris: Payot (Bibliothèque scientifique), 1927. Pp. 44–74.—The author presents two cases: one of progressive paranoid psychosis (probably introducing schizophrenia), and the other a case of persecution, the result of painful moral suffering of the patient. He gives a detailed daily account of the analysis of each. In his opinion the results from these analyses show that all psychoses not originally organic ought to be studied at their affective base; that, as to delirious psychoses, the roots of automatism are to be found in the unconscious affective life: it is the instinctive motive which activates this growing expansion of effective automatism. As to the question whether the tendencies denied by the patient and imaginatively realized during the delusion are simply repressed painful tendencies, the author abandons the narrow Freudian viewpoint. He believes that the psychosis is a product in the nature of a new affective teratological formation which in order to explain itself to consciousness, utilizes the way of the instincts, but which remains in itself unrealizable.—*Math. H. Piéron* (Sorbonne).

1544. **Hirsch, M., & Schwab, O.** *Diagnostische und therapeutische Bemerkungen zu einem geheilten Fall von Longitudinalthrombose und Schlafenlappenabszess. I. Otologischer Teil (Hirsch). II. Neurologischer Teil (Schwab).* (Diagnostic and therapeutic remarks upon a cured case of longitudinal thrombosis and abscess in the temporal lobe. I. Otological part (Hirsch). II. Neurological part (Schwab).) *Arch. f. Ohrenk.*, 1926, **116**, 31–41.—This singular case of a recovery from a purulent thrombosis of the sinus

longitudinalis, combined with an abscess in the right temporal lobe, and meningitis, is neurologically of interest because of the correct diagnostic distinction from cerebellar abscess and the particular localization of the center of trouble in the right temporal lobe. According to Schwab, the decisive symptoms were: (1) deviation of the hand opposite the center (left hand) in pointing, the deviation being toward the center; (2) a tendency to fall backward toward the left, whereas the center of the first symptom (discharge of pus from the ear) was on the right, which made the presence of a *left* cerebellar abscess (this alone being accordant with the symptoms) highly improbable; (3) the fact that the corneal reflex was intact and there was no nystagmus. To this was added, later on, rigidity of the opposite extremities and masklike immovability of the face. A hemianopsia on the left side, which is not rare in cases of abscess in the right temporal lobe, is explained by Schwab as due to the progress of the center of disease toward the occipital lobe.—W. Wirth (Leipzig).

1545. **Keschner, M., & Strauss, I.** *Myasthenia gravis.* *Arch. Neur. & Psychiat.*, 1927, 17, 337-377.—During the recent epidemics of so-called lethargic encephalitis, a number of cases presented the syndrome of myasthenia with involvement of the muscles innervated by the motor cranial nerves which were at times impossible to distinguish from genuine myasthenia gravis. This occurrence has led to renewed interest in the study of the symptom-complex known as myasthenia gravis. An historical resumé of the subject and its etiology is given. Under symptomatology are discussed electric reactions, muscle tonus, reflexes, sensation, vasomotor and trophic disturbances, psychic disturbances, laboratory observations and metabolic studies. One of the most important signs in the symptomatology of the disease is the finding of lymphorrhages in muscles excised *intra vitam*. As a laboratory aid in the diagnosis of myasthenia gravis, it is second to none. Their nature and incidence of occurrence are discussed under pathology and pathogenesis. Great stress has been laid on dysfunction of the endocrine system as the chief pathogenic factor, but the authors are inclined to regard endocrine disturbances and metabolic disorders as the effects rather than the cause. A satisfactory explanation has not as yet been offered as to the nature of the myasthenic reaction, which is a fatigue reaction. It still remains unsettled whether the cause of the reaction is myogenic or neurogenic. The diagnosis and treatment of myasthenia gravis are described.—I. Rappoport (Boston Psychopathic Hospital).

1546. **Laforgue, R., & Parcheminey, —.** *Conflicts psychiques et troubles organiques.* (Mental conflicts and organic disorders.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique*, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 27-44.—A study of the relations between psychic, organic, and functional disturbances by means of psychoanalysis. The latter has made it possible to discover some organo-psychic complexes and has been a substantial help in studying the influence of the mental faculties on the physical, and vice versa. The author presents 8 cases: (1) A case of phobia, with periodic eruptions of an ulcerous nature of from 1 to 2 centimeters in diameter, leaving behind a genuine gangrene after their disappearance. Recovery was effected in 2 months; observations continued for 5 months showed no relapse. (2) Schizophrenia, dissociation of psychic activity, with auditory and visual hallucinations; eruptions in the cervical region and on the lower limbs. At each menstrual period uncontrollable vomiting occurred. The treatment was interrupted after 8 months without complete recovery. The dissociation disappeared, as well as the visual hallucinations; the auditory hallucinations persist. There were more eruptions, but the vomiting continued. (3) Chronic enteritis, never having been alleviated by any treatment. Complete recovery. (4) Hys-

teria and obsessions. (5) Gastro-intestinal troubles. (6) A stasophobic young girl with serious neurotic disturbances, including iritis endangering her vision. Iritis cured; it was caused by the girl's wish to become blind. (7) Hysteria with genital disturbances; severe menorrhagia alternating with suppressed menstruation. Genital indications related to a sexual conflict which made a surgical operation on the vagina necessary. Constipation cured. Normal return of menstruation. (8) Serious neurotic state, stasobasophobia resulting from emotional resistance against the regimen ordered by the doctor. Marked improvement after removing the dread of the regimen by analyzing it. To sum up, psychoanalysis made it possible in all these cases to study psycho-organic reactions more closely and to class cases of predominantly organic manifestations among the psychoneuroses, and proved a useful weapon even in cases where all other treatment had failed.—*Math. H. Piéron* (Sorbonne).

1547. **Laroche, G.** *Etude critique de la réaction du benjoin colloidal.* (Critical study of the colloidal benzoin reaction.) *Ann. de méd.*, 1926, **20**, 499-529.—There is included a description of the technique, the mechanisms of the reaction, the diagnostic value, the sources of error, and the prognostic value of the colloidal benzoin reaction as a test of the spinal fluid in all forms of syphilis of the nervous system, tubercular meningitis, etc. Typical results are given in selected cases.—*F. Fearing* (Ohio Wesleyan).

1548. **Lehmann, R.** *Einige Bemerkungen zur Paranoiafrage.* (Some comments on the problem of paranoia.) *Psychiat.-Neur. Woch.*, 1927, **29**, 86-88.—Stimulated by the questionnaire of the German Institute for Psychiatric Research, concerning the heritability of true (Kraepelin's) paranoia, the author expands his earlier observations in vol. 11, No. 37, 1909, upon this form of disease. The delusion system itself is less decisive than the tendency to delusion, the parathymia which, according to Iwanow-Smolensky, may ultimately be related to an exaggerated sensibility of certain portions of the cerebrum. The author would also restrict the typical phenomena to ideas of persecution and imposition, i.e. delusions in which the sufferer plays a passive rôle, and which according to his experiences, and also Bleuler's, have never given rise to delusions of grandeur.—*W. Wirth* (Leipzig).

1549. **Lemos-Magalhaes, —.** *Crampe des écrivains au cours du syndrome Parkinsonien encéphalitique prolongé. Localisation striée probable. Démembrement de la crampe des écrivains.* (Writers' cramp associated with the Parkinsonian syndrome in prolonged encephalitis. Probable localization in the corpus striatum. Analysis of writers' cramp.) *Rev. neur.*, 1927, **34**, 161-180.—A detailed statement of the case of a Parkinsonian encephalitic patient suffering from writer's cramp and various other motor disturbances (intermittent lameness, paroxysmal motor disturbances, poor food absorption) which, according to the author, are the result of the same cramp affecting other muscular groupings. All the symptoms represent tardy manifestations of epidemic encephalitic infection. The writers' cramp, generally considered as a psycho-motor neurosis, presents two other varieties of an organic nature, one that is peripheral through injury to the nerves of the brachial plexus, the other of central origin through injury of the corpus striatum. The present case is to be classified under the latter variety. This cramp, in fact, is not caused by any mental derangement, but by a derangement of the muscular tonus; it is a simple paroxysmal aggravation of the patient's Parkinsonian hypertonia.—*Math. H. Piéron* (Sorbonne).

1550. **Lidbetter, E. J.** *Insanity and detention.* *Eug. Rev.*, 1927, **18**, 312-321.—Summarizes and discusses a recent report of the Royal Commission on lunacy and mental disorder. The Commission states in this report that "the key-note of the past has been detention: the key-note of the future should be pre-

vention and treatment," and makes four cardinal suggestions as follows: (1) voluntary treatment without certificate or under "Provisional Order"; (2) to permit patients to be maintained in institutions hitherto unlicensed; (3) the "extrication" of lunacy administration from the Poor Law; and (4) the establishment of a national system of research.—*B. S. Burks* (Stanford).

1551. **Lungwitz, H. Erkenntnistherapie.** (Explanation therapy.) *Psychol. u. Med.*, 1926, 2, 1-27.—The writer believes that neurosis can best be treated by explaining to the patients how, as psychobiological organisms, they are badly adjusted to their environment. As an illustrative case he takes a "pain neurosis" in an anxious housewife of forty, who must have had a fair amount of education since she had been a teacher of art. The treatment required four weeks of almost daily interviews. None of its details are given. The writer sketches his view of the human organism as a complex of reflex systems, of consciousness as epiphenomenal, of all nervous diseases as forms of infantilism, and of sin and moral responsibility as meaningless, but for a genuine understanding of his doctrine he refers the reader to his book, "Die Entdeckung der Seele" (Leipzig).—*E. A. McC. Gamble* (Wellesley).

1552. **Markowitz, J., & Soskin, S. Pancreatic diabetes and pregnancy.** *Amer. J. Physiol.*, 1927, 79, 553-558.—Carlson and his co-workers have previously reported that "the internal secretion (of insulin) from the pancreas of the foetus may, in part at least, protect the mother against the consequences of pancreatectomy in the mother." The present investigators are unable to find substantiating evidence. Pregnancy in pancreatectomized dogs does not produce greater reduction in glycosuria than is consistent with the law of normal biological variation. There is no evidence that the foetal pancreas secretes insulin, which is absorbed by the maternal organism, in sufficient quantities to offset the diabetic condition induced by extirpation of the pancreas. The mammary glands of pancreatectomized dogs fail to hypertrophy in the normal manner in pregnancy.—*M. J. Zigler* (Wellesley).

1553. **Mattison, J. A. Occupational therapy in general hospitals.** *Occup. Therap. & Rehab.*, 1927, 6, 105-111.—The goal to keep in mind is the returning to society of a self-supporting, self-respecting citizen. Consequently the rehabilitation program should be accomplished as expeditiously as possible, so that there will be the least deterioration and damage to the patient's previous habits of industry. His program should be intelligently worked out and carefully correlated. Follow-up interest manifested by the doctor, aide or nurse, is of considerable advantage. The occupational therapeutic treatment should be considered just as carefully as the other therapeutic measures. The above points are illustrated by case studies.—*H. E. Burt* (Ohio State).

1554. **Mayer, E. E. Hysteria: with special reference to the H-R syndrome of Kretschmer.** *Amer. J. Psychiat.*, 1927, 6, 523-544.—The question is raised whether Kretschmer's hypobulic will could not function normally without dissociation or splitting. The "dereistic" type of Bleuler is suggested as a contrasting type, his syntonie type understood to represent a balance between the two. Attempts at delineation of character based upon types are apt to be superficially impressionistic and not realistic. It is not possible to use dogmatically a faculty term like "will," as Kretschmer uses it, in connection with hysteria. Kretschmer's conception of hysteria as due to repressed complexes whose ambivalent components are transferred into spheric ones is scholarly and stimulating, but he uses his cross-section of schizoid and cycloid temperamental types rather loosely. The flux of the libido can easily shift the relationship between the two trends in the individual at different periods of his life. The narcissistic cravings need a causal connection, and Kretschmer, in preference to accepting the un-

conscious of Freud, substitutes for it the spheres of Schilder.—*B. Kendall* (Boston Psychopathic Hospital).

1555. **Melkerson, E.** *Le symptôme du freinage.* (The checking symptom.) *Rev. neur.*, 1927, **34**, 189–196.—The checking symptom is a phenomenon which appears in some patients when required to move the index finger toward the nose; the finger stops short a few centimeters away, as if suddenly arrested by some check, and then slowly continues in its movement toward the goal. This happens also if the finger is moving toward some external object, which makes untenable the hypothesis that the check may be caused by the fear of hurting oneself. The fear of not reaching the goal is not the exact cause either, for this symptom was noticed in a blind patient who performed the movement toward his chest. Relative to this the author observed all the neurotic patients in a hospital. Of 6000 cases observed, the checking was found in 60, who were suffering from diseases affecting the cerebral apparatus, especially multiple sclerosis; but it was not met with in non-organic nervous affections. It is therefore a common cerebellar symptom which ought to be investigated. The author refers to two typical cases, showing the cerebellar nature of the syndrome, and a case of psychogenic checking, showing how it differs from real checking. A small bibliography.—*Math. H. Piéron* (Sorbonne).

1556. **Minkowska, F.** *Le problème de la constitution examiné à la lumière des recherches généalogiques et son rôle théorique et pratique.* (An examination of the problem of physical constitution in the light of genealogical researches, and its place in theory and practice.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique*, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 185–216.—An account of the work of Kretschmer. There are, according to the author, two essential points in this work: (1) the opposition of two psychological constitutions, cycloid and schizoid; and (2) the attribution of corresponding biological types to these psychological constitutions. The author later on speaks of his own observations on two families. He is of the opinion that these researches must be of practical importance, since they introduce the question of prophylaxis. They ought to lead to the avoidance of mating between two defects of the same nature, and to the selection of the life surroundings best adapted to each kind of constitution.—*Math. H. Piéron* (Sorbonne).

1557. **Minkowski, E.** *De la rêverie morbide au délire d'influence.* (Morbid imagination and delusions of power.) *L'évolution psychiatrique. Psychanalyse. Psychologie clinique*, Tome 2. Paris: Payot (Bibliothèque scientifique), 1927. Pp. 130–184.—A study of the two principal symptoms of psychopathology (mental automatism and morbid reverie) in relation to the case of a patient whose manifestations of a morbidly imaginative activity are closely linked to the symptoms of mental automatism evinced in a desire for influence. The author tries to point out various pertinent questions relating to his case: (1) questions of the semeiologic order (olfactory hallucinations, retrospective tendency, phenomena, psychological differences between true and false hallucinations, according to the patient's own description); (2) questions of the psychoanalytic order (content of the psychosis); (3) questions relating to the constitution; (4) questions of the phenomenologic order; and (5) questions of the clinical order (e.g., is this a matter of chronic hallucinatory psychosis or is it a case of schizophrenia?).—*Math. H. Piéron* (Sorbonne).

1558. **Mirelson, L. A.** *Zur Frage des Aufbaus der reaktiven Psychosen.* (Concerning the structure of reactive psychoses.) *Arch. f. Psychiat. u. Nervenk.*, 1926, **79**, 131–149. (From the Odessa Medical Institute (E. Shevarev) and the Psychiatric Sanatorium (L. Eichenwald).)—Discusses the individual conditions for psychoses which are precipitated by mental shock; the work is based

on a wide literature and illustrated by three original cases. The objective meaning of the trauma is never sufficient for its explanation; both the limit of stress which can be borne without psychosis and the special form of the morbid process depend largely on the character of the personality as a whole.—*W. Wirth* (Leipzig).

1559. **Mönkemöller, K.** *Psychopathie und Gesetzgebung.* (Psychopathy and legislation.) *Arch. f. Krimin.*, 1925, **77**, 31-49; 114-125; 210-222; 281-286.—In the introduction M. discusses the reciprocal action between psychopathy and the conditions and the development of modern Germany. Legislation takes the prevalence of psychopathy into account in that it is beginning to occupy itself more vigorously with the psychopaths. The author debates the questions to what extent legislation has already taken place, and to what extent it is yet to take place, and then discusses child psychopaths, and in conclusion adult psychopaths. Between these two age groups falls puberty which especially is being taken into account in its significance for psychopathy. For child psychopathy child welfare and the juvenile courts take the place of legislation. The procedure relative to coming of age is next in need of reform. In the criminal proceedings the question is that of the judgment of responsibility, and in the infliction of punishment it is a question of the particular treatment for a person whose responsibility is impaired. M. discusses custodial education fully, particularly institutions for the psychopathic. Custodial education is supplemented by supervisory protection. Of particular pedagogical significance is the "probation time" in which special duties can be placed upon the sentenced child and he can also be placed in custody. The adult psychopaths include, besides many criminals, especially most vagabonds and idlers with whom legislation has also busied itself, partly in preventive measures (work colonies, care and the like). The conception of a law for the combating of venereal disease also belongs in this connection, since most prostitutes are psychopaths also. "In their case likewise everything indicates custody." The custodial institutions, and also those for asocial persons (habitual criminals), shall by no means be only places of punishment, but also places of industrial education. At present the psychopaths populate the institutions for the insane much less than the prisons. There are in addition many discussions of the value of punishment as a means of education.—*O. Lippmann* (Berlin).

1560. **Nayrac, —, & Bataille, —.** *Sur un cas de surdit  verbale pure.* (A case of pure word deafness.) *Echo m d. du nord*, 1927, **31**, 42-45.—The patient responds only to written questions. Her oral answers are distinct, her written answers are equally normal. She states that she hears, but does not distinguish words. She is able, by reading the lips, to understand strongly articulated words. She likewise does not identify any noise (bell, barking, etc.). This patient does not show any intellectual defect, but presents some mental disturbances: she has a chronic auditory delusion with hallucinations, and she notices that during such attacks she understands words, distinguishes the tones of voice of those who speak to her, and whether they are women, men, or children. It appears that we have here a case of purely verbal deafness with auditory agnosia, and that the theory of D j rine best explains the case.—*Math. H. Pi ron* (Sorbonne).

1561. **Oloff, H., & Korbsch, H.** * ber das Hertwig-Magendie'sche Ph nomen.* (On the Hertwig-Magendie phenomenon.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, **79**, 200-223. (From the University Clinic at Kiel (Siemerling).)—The phenomenon of vertical divergence of the eyeballs, which was experimentally produced in animals first by Heinrich Hertwig and later by Magendie, Schiff and others, is clinically very uncommon. The case here in question, of a man 59 years old, having a tumor (glioma) in the right cerebellar hemisphere and its

peduncles, showed the right eyeball in straightforward vision deviating downward and inward, the left one outward and upward; the author interprets this, as a result of findings in a cross section of the brain, as a (probably secondary) degeneration of the fasciculus longitudinalis posterior, which he regards as the connection of the oculomotor nuclei of the mid-brain with the region of the vestibular centres. Why lesions in this bundle of Bruce and Spitzer may occur without the phenomenon mentioned remains an open question. —W. Wirth (Leipzig).

1562. **Ombredane, A.** *Sur le mécanisme de l'anarthrie et sur les troubles associés du langage intérieur.* (Concerning the mechanism of anarthria and the associated disturbances of internal language.) *J. de Psychol.*, 1926, **23**, 940-955.—This paper is the result of observations made on a 33-year-old anarthritic at the Salpêtrière. It consists largely of clinical description, but includes a critical discussion and summary of current theories as to the nature of anarthria. The author believes that anarthria must be sharply distinguished from aphasia, although the latter may be an accompaniment.—C. M. Diserens (Cincinnati).

1563. **Pages, I.** *Quelques considérations sur la psycho-pathologie de la volition.* (Some considerations on the psycho-pathology of volition.) Paris: Alcan, 1926. Pp. 59.—The author explains what he calls the false diseases of volition (obsession, dementia praecox) and the real maladies of volition. He declares that the underlying principle of volition is not a part of the domain of psychological observation, but that it reveals its activity by a psychic act which is the volitional judgment whose normal or morbid aspect one may study. A small bibliography is appended to the study.—Math. H. Piéron (Sorbonne).

1564. **Papale, R.** *Alcune alterazioni motorie della laringe nella sclerosi a placche.* (Some motor alterations of the larynx in multiple sclerosis.) *Attes d. 5. Cong. int. d. Phil.* (Naples, 1924).—In registering the simultaneous tracings of the movements of the larynx, of the thorax and of the diaphragm during the emission of a vowel (as in singing) in a patient afflicted with multiple sclerosis with derangements of speech. The author has observed irregular oscillations of the vocal cords, which coincide with the end of the inspiration and precede the emission of the voice. Rather than an expression of ataxia, they may be an indication of anataxia and of the effort accomplished by the patient. In the same person the inspiratory rise after a voluntary apnoea was preceded in the record by the same irregular oscillations of the vocal cords, due in this case to insufficient relaxation of the constricting muscles. He has observed other changes in emotional laughter.—G. C. Ferrari (Bologna).

1565. **Pardee, I., & Knox, L. C.** *Tuberculoma en plaque.* *Arch. Neur. & Psychiat.*, 1927, **17**, 231-238.—The case presented in this paper was watched from its incipency with an intermission to its termination, for a period of five years. Its symptomatology of jacksonian attacks was sufficiently confusing in its earlier stages to make a positive diagnosis impossible, while the physical signs of right-sided hyperparesthesia and hyperreflexia were so variable that the inevitable conclusion was made that we were dealing with a hystero-epilepsy. The macroscopic appearance of the tumor was so suggestive of a glioma at necropsy that until sections were examined it was so considered, until the well-known giant cell reaction of tuberculosis was observed.—I. Rappoport (Boston Psychopathic Hospital).

1566. **Parker, H. L.** *Involvement of central nervous system secondary to primary carcinoma of lung.* *Arch. Neur. & Psychiat.*, 1927, **17**, 198-213.—In four cases of primary carcinoma of the lung with invasion of the brain, meninges, spine and nerve roots, the carcinoma gave few signs, and the involvement of the nervous system was the most striking feature in each case. The clinical and

necropsy records in each case illustrate the great variability in the course and tendencies of the disease and the difficulties in diagnosis. The study demonstrates the necessity of a complete general physical examination in every case of disease of the central nervous system.—*I. Rappoport* (Boston Psychopathic Hospital).

1567. **Pines, J. L., & Maiman, R.** *Beitrag zur Lehre von der Paralysis Landry.* (A contribution to the study of Landry's paralysis.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, **79**, 175-199. (From the Leningrad State Institute for Study of the Brain, V. M. Bekhterev.)—A severe case, beginning with abdominal trouble, developed symmetrical paresis of the extremities and abdomen, inhibition of breathing, but no dulling of the sensoria, and ended with death; the autopsy revealed a swelling and deep fatty degeneration of the nerve cells in the anterior horn and the columns of Clark. As this change in the nerve cells decreases in an upward direction, and toward the pons disappears altogether, while the blood vessels of the cerebral cortex show the greatest modification, it seems plausible that mutations of such vessels in the deeper regions, perhaps long-established, have preceded the neuronie degenerations. Certainly such degenerative cases, of purely toxic conditioning, could be contrasted with the inflammatory (polyneurotic, myelitic, etc.) cases as a special group, distinguished by having an exaggerated toxin-sensitivity as one of its constitutional and possibly gastro-intestinal preliminary conditions. The author discusses a wide literature.—*W. Wirth* (Leipzig).

1568. **Price, H. G.** *Some special problems in private mental hospitals.* *Occup. Therap. & Rehab.*, 1927, **6**, 37-40.—The private patient is not so interested in the finished article because of intrinsic value. The problem of motivation is therefore a little more difficult. His standard may be kept up, however, through appreciation of the craft itself. The frequent comment is, "I pay enough here not to have to work for the hospital." The viewpoint of men toward occupational therapy in these cases seems a little more favorable than that of women. A wide choice of crafts is desirable to meet the variety of personalities. Occupational therapy often leads to a hobby on the part of such patients, but seldom to a vocation. The latter usually develops for the cases in the reconstruction hospital.—*H. E. Burt* (Ohio State).

1569. **Putnam, T. J., & Putnam, I. K.** *The experimental study of pachymeningitis hemorrhagica.* *J. Nerv. & Ment. Dis.*, 1927, **65**, 260-273.—A true, progressive, chronic haematoma of the dura has apparently not been produced experimentally. Lesions following subdural injections of blood, and in patients after operation, resemble the progressive lesion in appearance but not in behavior. Pachymeningitis, broadly speaking, may be produced experimentally by subdural injection of blood or fibrin, but the lesions are not progressive.—*O. W. Richards* (Boston Psychopathic Hospital).

1570. **Reiter, P. J.** *Extrapyramidal motor disturbances in dementia praecox.* *Acta Psychiat. et Neur.*, 1926, **1**, 287-304.—On the basis of ten case-histories (supported by observations from much more extended material to be published elsewhere) the writer offers his own theory that in dementia praecox "the psychic process and the neurological symptoms must be looked upon as the outcome of the 'noxe' which acts as a destroying agent upon closely related cerebral organs." The possibility is pointed out that the endocrine anomalies and vegetative disturbances of tonus in dementia praecox may be caused by toxic infection. This would explain the anatomical lesions observed in the brain—and the many diverse results from heredo-biological and endocrinological investigations. Observations from the writer's entire material seem to support the above views.—*M. L. Reymert* (Wittenberg).

1571. **Roussy, G., & Levy, G.** Phénomènes de décérébration, de torsion spasmodique et d'athétose. Leurs relations cliniques et pathogéniques. (Phenomena of decerebration, of spasmodic torsion and athetosis. Their clinical and pathogenic relations.) *Ann. de Méd.*, 1926, 20, 460-479.—The analogies between decerebrate postures and spasmodic torsion and athetoid postures are discussed. The clinical findings in one case are presented in detail. In this case there was observed a spasmodic torsion (hyperpronation of the arm), athetoid phenomena and decerebrate postures. The symptoms were attributed to a lesion of the red nucleus but are not presumed to be due to an interruption of the thalamic-cerebellar connections.—*F. Fearing* (Ohio Wesleyan).

1572. **Schneider, A.** Untersuchungen über den Körperbau der Psychopathen. (Studies on the body structure of psychopaths.) *Monatssch. f. Psychiat. u. Neur.*, 1925, 59, 104-117.—The author shows, on the basis of a small amount of material to be sure, that there is no biologically founded parallelism between "schizoid" psychopathy and body structure, and warns against undue emphasis on the concepts "schizoid" and "cycloid." He rightly emphasizes that, because of the confusion in the use of the term, it is almost impossible to find a healthy person who might not also have a personality which could be construed as "schizoid."—*Th. Ziehen* (Halle a/S.).

1573. **Schroeder, C. L.** Psycho-Energetik (Neugestaltung seelischer Diätetik). (Psychoenergetics—a new form of psychic dietetics.) *Psychol. u. Med.*, 1926, 2, 27-38.—This writer holds that for neuropathic patients reflection under guidance and self-examination under direction are efficacious therapeutic measures. Patients may be shown that the psychic energy which can make them masters of their fate comes with definite decision in the light of boldly faced facts. They should be asked to write out at leisure answers to a series of minute and searching questions in regard both to their past life and to their present character traits. In self-analysis, the danger of fixation upon the analyst is avoided. To his paper the writer appends a brief guide to the harmonizing of life and his list of questions for self-probing. In the matter of character study he acknowledges his indebtedness to Kretschmer.—*E. A. McC. Gamble* (Wellesley).

1574. **Schuster, J.** Über die Oberflächenbilder der Encephalogramme. (Concerning the surface pictures of encephalograms.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, 79, 276-311.—This and the work of Fischer (Abstract 1532) supplement each other in certain ways; Fischer presents 20 photographs, showing for each case one or two characteristic appearances, besides a full bibliography, whereas Schuster's crude sketches give only the outlines of the brain surface in rice-paper tracings from the X-ray plate, but usually offer three or even all four aspects. Furthermore Schuster is far more confident than Fischer in his evaluation of the Bingel method. Schuster attacks the practical problem of determining whether, in a series of cases of genuine epilepsy and of brain tumors with epileptic attacks, the centres of these previously observed convulsions may be traced on the encephalograms, and whether this interpretation can be borne out by controlling such centres through electric stimulation after trepanation. He actually found, in his 19 cases, the maximal modification to be often in these physiological centres, in the gyri centrales and the regions denoted by C. and O. Vogt as 6a α and 6a β . And indeed the attacks disappeared after successful excision of these centres, or effective incision or decompression; notably in his first case, a girl of 16 with a large cyst in the aforementioned gyri.—*W. Wirth* (Leipzig).

1575. **Scripture, E. W.** Neurologie des Stotterns. (The neurology of stuttering.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, 79, 224-229.—The author

summarizes the symptoms and causes of purely functional stuttering, as cited in his previous articles in these archives, where he believes himself able to establish exact schemata of "causal equations" with regard to his curves of speech. Like Gutzmann, he follows Kussmaul in regarding these defects as failures of co-ordination, but seeks to hold a congenital weakness of the feelings of personality somehow responsible (influenced by Adler?) for the fact that the nature of the stutterer seeks this secondary means of driving him out of society, in which he does not feel himself of satisfying importance.—W. Wirth (Leipzig).

1576. **Shaffer, W.** *Anatomy of design.* *Occup. Therap. & Rehab.*, 1927, 6, 1-13.—The ability to discriminate good and bad design and adapt designs already created is more important than actual drawing talent for occupational therapy. A patient with such ability may be advantageously employed in executing designs. The article discusses the three principles of order in design. The first is rhythm or accented motion. This may be brought about by repetition, by alternation, or, in the highest type, by an arrangement of well proportioned graduated lines, tones, or areas, which produce a measured rhythm. The second principle is balance, which may involve symmetry—the opposition of equal parts—or occult balance, which is more a balance of feeling. In this type we have the center of interest constituting the center of balance, and unequal attractions balance about this center. The third is harmony of the parts of design, so that they are mutually dependent. This may involve harmony of lines or of spaces. One center of interest may be selected and all the other lines and spaces arranged to lend interest to it. By the application of design to forms already constructed composition is developed. A list follows of the main elements that constitute a good composition. There are also several plates which illustrate various types of rhythm, symmetry, occult balance and the like.—H. E. Burt (Ohio State).

1577. **Solomon, M. H.** *Annual address of the president, Section of Psychiatric Social Work, American Association of Hospital Social Workers.* *J. Abn. & Soc. Psychol.*, 1927, 4, 422-433.—A brief review of the activities of this association, and discussion of some of its problems, with recommendations for lines of future development.—E. N. Brush (Boston Psychopathic Hospital).

1578. **Stanojevic, L.** *Über die Art des Gedächtnisabbaues bei Paralytikern; eine experimentell-psychopathologische Studie.* (On the manner of the loss of memory in paralytics; an experimental-psychopathological study.) *Arch. f. Psychiat. u. Nervenkr.*, 1926, 79, 170-174.—In ten cases of paralytic imbecility, the loss of memory has been traced experimentally from an early stage through several months, in some cases several years. Three groups have thus been distinguished, the third one of which shows amnesia for recent events from the very beginning, whereas in the other, originally better groups, this and other symptoms do not arise until a later stage is reached. However, in one case of the third group, the ability to perform mathematical computations endured for a long period, until the last remnant of memory disappeared. The author assumes a certain parallelism between the loss of memory and the general step-wise progress of the morbid processes, directed toward the frontal and temporal regions of the cortex. It is impossible, however, to foretell which regions are the first to be destroyed, since this depends upon the individually variable degrees of resistance in the particular organs.—W. Wirth (Leipzig).

1579. **Sullivan, H. S.** *Affective experience in early schizophrenia.* *Amer. J. Psychiat.*, 1927, 6, 467-483.—A detailed study of the facial expression of the schizophrenic has shown that his alleged indifference, apathy, and emotional disharmony are more a matter of impression than a correct evaluation of his inner experience. The study of such inner affective experience by positive objective

means seems a necessary preliminary to more intelligent therapy and to prevention. Valid results along this line have not been reached because of the patients' susceptibility to disturbing delusional reactions. Elaboration of apparatus and technique are necessary so that the final movements and tonic postures of the facial muscles may be correlated absolutely in time with the psychogalvanic response. Phonograms, pulse tracings, respiratory records, and fluoroscope observation of visceral tone may be used in addition. One must reduce distracting and disturbing factors, and insure the integrity and simplicity of sentence "conveyed" to the subject.—*B. Kendall* (Boston Psychopathic Hospital).

1580. **Townsend, D.** Prescribing occupational therapy for sanatorium patients, with special reference to their physical limitations. *Occup. Therap. & Rehab.*, 1927, **6**, 87-98.—Prescription of occupational therapy should take into account not merely the physical limitations but also the mental and emotional attitude of the individual. It must be varied according to the state of progress of the patient. Even in the bedside cases, however, it is possible to provide things which afford an opportunity for the exercise of ingenuity. Mild degrees of competition with the creations of other patients may sometimes be involved. Things requiring little effort, such as knotting projects, reed work, raffia, and work with needles, are available at this stage. As the patient reaches the semi-ambulant stage, there is a greater variety of projects to arouse interest and give moderate physical exercise. Various projects in the workshop are available at this time. Finally, in the stage where the individual is able to do moderately strenuous work, there are possibilities of carpentry, cabinet making, gardening, and even auto mechanics. Various case studies are presented showing some of the possibilities at different stages of convalescence.—*H. E. Burt* (Ohio State).

1581. **Truelle, —, Rogues de Fursac, —, & Bonnet, —.** Un cas d'amnésie retardée. (A case of retarded amnesia.) *Ann. de méd. leg., criminol., police sci.*, 1927, **7**, 39-46.—A psychological study of a short amnesia in a criminal.—*Math. H. Piéron* (Sorbonne).

1582. **Turner, F. D.** Intelligence tests at the Royal Eastern Counties Association. *Ment. Welfare*, 1926, **4**, 95.—Comparison of results of different mental tests on mentally defective patients.—*E. Fox* (Central Association for Mental Welfare).

1583. [Various.] Report of the special medical advisers on St. Elizabeth's Hospital. *Amer. J. Psychiat.*, 1927, **6**, 545-577.—Report of a survey of St. Elizabeth's Hospital made at the request of the Honorable Hubert C. Work, Secretary of the Interior, by a committee composed of Drs. Owen Copp, Arthur H. Ruggles, H. W. Mitchell, George M. Kline, and S. E. Smith.—*B. Kendall* (Boston Psychopathic Hospital).

1584. **Vestberg, E.** Om Skottlands sinnessjukvård. (Public care of the mentally diseased in Scotland.) *Svenska Läkartidn.*, 1927, **24**, 71-84; 117-125.—Critical report from personal observations and study during a visit to Scotland in 1926, with frequent references to conditions in Sweden, where a comprehensive state program is now under discussion.—*M. L. Reymert* (Wittenberg).

1585. **Watson, H. F.** Syphilis and mental disease. *J. Ment. Sci.*, 1926, **72**, 573-582.—"In this series of cases studied, the flocculation test, if not superior to the Wassermann reaction, has been proved to be in no way inferior, and its application is much simpler. The investigation suggests that while syphilis in mental hospitals is more common among men than among women, there is not such a wide difference as was at one time supposed. By means of laboratory methods it can be demonstrated that the incidence of syphilitic infection is much greater than had been suspected. The percentage has been raised from 12 to 15% in some hospitals. Better conclusions can be arrived at when a greater

number of mental hospitals are available for comparison, but a true index can only result if the observations are made by the same author."—*E. F. Symmes* (Yale).

1586. **Wertheimer, F. J., & Hesketh, F. E.** Observations and remarks on the physical constitution of female psychiatric patients. *Amer. J. Psychiat.*, 1927, 6, 499-506.—In a series of 31 female psychiatric patients the trunk volume ÷ limb length proportion corresponded with the visual impression of body types, the pyknic showing low values, the asthenic high ones. The averages and range of variation are markedly higher in women than in men. No influence of the age factor on the index is indicated. No dysplastic signs occur in the clear manic-depressive cases. Two characteristic types, in which the contrast in regional fat distribution is striking—obesity above the waistline and thinness below it, or vice versa—are not infrequent and seem allied to "lipodystrophia progressiva." The recognition of body types in women is more complicated than in men, and exact biometric methods will call for a perfection of technique and more clarity in type diagnosis.—*B. Kendall* (Boston Psychopathic Hospital).

1587. **Williams, A. C.** Combined defect. *Ment. Welfare*, 1926, 4, 83-99.—A survey of methods of diagnosis and mental testing to determine whether there is mental deficiency in children suffering from some physical defect making testing and education by ordinary methods impossible. Paralysis, blindness and defective vision, deafness, complete and partial, are considered and appropriate tests described.—*E. Fox* (Central Association for Mental Welfare).

1588. **Woltman, H. W., & Shelden, W. D.** Neurologic complications associated with congenital stenosis of the isthmus of the aorta: a case of cerebral aneurysm with rupture and a case of intermittent lameness presumably related to stenosis of the isthmus. *Arch. Neur. & Psychiat.*, 1927, 17, 303-316.—Two cases are reported. The subject of the neurologic complications associated with stenosis of the isthmus may be summarized somewhat categorically. In the congenital anomaly of stenosis of the isthmus, circulatory disturbances may arise which are often of interest to the neurologist. Above the site of stenosis, the volume and pressure of blood may be excessive; this may result in cerebral disturbances and may be associated with, or contribute to the production of, aneurysms of the cerebral vessels which may rupture, with fatal results. This was obviously what occurred in Case 1. In the lower extremities, the supply of blood may in rare instances be deficient. This may presumably bring about the syndrome of intermittent limping and is the explanation offered for the disturbance in Case 2. Congenital stenosis of the isthmus is no longer regarded as being excessively rare. Its recognition may be of interest and may even have some practical value. In the short discussion that follows a case is presented as one of congenital aneurysm of the anterior cerebral artery, not associated with syphilis.—*I. Rapoport* (Boston Psychopathic Hospital).

1589. **Ziegler, L. H.** The neuropathological findings in a case of acute Sydenham's chorea. *J. Nerv. & Ment. Dis.*, 1927, 65, 273-282.—"The neurological findings in a case of acute Sydenham's chorea, with acute endocarditis, were chromatolysis of practically all cells of the central nervous system, with swelling of nuclei and eccentric displacement; destruction of some neurons, especially sixth nerve and calcarine cortex, where glia cells were much proliferated; neuronophagia; fatty deposits in the large cells in the motor cortex and pallidum; fat in the perivascular spaces; and petechial hemorrhages in a small area near the dorso-medial aspect of the restiform body of the medulla." Recent study emphasizes lesions in the corpus striatum which resemble those of epidemic encephalitis. Though this disease is curable, residual disturbances of the motor system usually remain.—*O. W. Richards* (Boston Psychopathic Hospital).

1590. **Zoltan, A.** *Über psychiatrische Vererbungsforchung.* (The psychiatric investigation of heredity.) *Psychiat. Neur. Woch.*, 1927, **29**, 56.—(Festschr. f. G. Olah.) Olah, in whose honor this volume is compiled, in his capacity of assistant secretary of state in Hungary has by his proposal of a law worked toward the official collection of material concerning all cases of congenital insanity, taking into account the progeny and all blood relatives. He recommended that the Medical Examiner should seek out the relatives and register all who are psychotic.—*W. Wirth* (Leipzig).

[See also abstracts 1472, 1494, 1498, 1510, 1611, 1612, 1631, 1638, 1644.]

SOCIAL FUNCTIONS OF THE INDIVIDUAL

1591. **Angell, N.** *The public mind.* New York: Dutton, 1927. Pp. x + 232. \$3.00.—The author presents the problem of the public mind from a political point of view. In Part 1 he pictures the public mind as revealed at an election, during the war period, and at the peace conference. By discussion and story it is shown that public opinion is determined by minor and inconsequential considerations, even in the face of great crises; that it is unstable, emotional, inconsistent, unjust, and cruel. In national crises it seems that the "professor" and the "parson" are no more to be relied upon for sane views on matters concerning the problem involved than are the uneducated. The human weaknesses revealed in such situations have been capitalized by the press, which intensifies and fixes more firmly the type of character and the state of mind out of which those evils grow and become so dangerous. Part 2, entitled "Social security and the public mind," shows that the control of governments by wealth is no assurance of the security of wealth or social order; that so-called "economic determinism" is not as an important a factor in determining national conduct as is nationalistic organization; that change and adjustment to new conditions are essential to social stability. The public must judge these changes, and can do so wisely only through developing "a certain type of mind," to which discussion is indispensable; yet the author points out that "in that indispensable thing we have all but completely ceased to believe." Part 3 deals with the question: "What can we do about it?" A dictatorship cannot solve the problem, for even the dictator must be influenced by public judgment. Democracy is to be defended upon this basis rather than upon the ground that "the will of the people is the will of God;" as opposed to such a statement as the latter, Angell writes: "We may hope to make democracy safe if we face squarely the fact that the voice of the people is usually the voice of Satan." However, since the voice of the people will be heard, he suggests that we "make the best of it by adapting the political instruments of democracy to the changed conditions of the modern world; by educating more consciously for social judgment, for the art, that is, of thinking about common facts correctly; and by using education to guide 'human nature,' to develop a sense of social obligation to rise at times above instinct, temper, passion, and to assist the mind to realize the moral obligation to apply intelligence."—*L. M. Harden* (Clark).

1592. **Diserens, C. M.** *The influence of music on behavior.* Princeton: Princeton Univ. Press, 1926. Pp. 224. \$2.50.—The data for this practical survey of musical influences was obtained from ethnology, sociology, culture history and experiment, and from these various fields a convergent proof of the influence of music on the organism was derived. The reliability of the data is said to be increased by the fact that response to musical stimuli seems to have had an important part to play in biological evolution, this fact leading to the inference that

some kind of reaction to music can be looked for with absolute certainty in all animal organisms. It is shown that in all animals, except the unicellular organisms and the simplest in structure of the multicellular organisms, there are definite reactions to music and that these agree with the responses of human beings, especially those at the lower end of the scale. "The various data on musical effects all seem to point to the statement that "similar effects are experienced by individuals in all stages of social development." Myths and folk tales, which "represent the scientific observations of the race in its infancy," furnish the earliest data on musical response. Accounts of primitive magical practice reveal the dominance of music in magical behavior. The author believes this may be due in part to the increased stimulation and energy which music provides and which contributes to the organic condition necessary in performances of magic; and also to the presence of secondary phenomena, such as colored hearing, imagery, etc., in connection with audition. A chapter on musical therapeutics, made up largely of a review of the field and a number of case reports, shows striking influences of music on the sick organism. The influence of music on mechanical work is discussed, the fact being brought out that rhythm furnishes regularity, thereby eliminating the strain of voluntary attention and causing a speeding up of muscular reaction, and that tone lends force to the movements. The remainder of the book deals with the results of experiments on individuals and includes a review of the experimental work of other investigators and a number of original experiments. The latter indicate that all "activities tested are considerably accelerated by music and an increase in the energy and extent of reflexes frequently occurs."—*M. Goodrie (Clark)*.

1593. **Ellis, H.** *A study of British genius*. Boston: Houghton Mifflin, 1926. Pp. xvi + 396.—A work, originally published in 1904, to which 4 new and according to the author irrelevant chapters have since been added; it is based upon a study attempting to ascertain the anthropological and psychological characters of British genius. Roughly the 1030 people (975 men and 55 women) selected for study were those persons to whom 3 pages or more of space were allowed in the Dictionary of National Biography; eliminations were made in cases where position was influenced by the accident of birth or where eminence seems to have been secured by the accident of circumstances; inclusions were made in cases which seemed, after careful examination, justifiable to the author. The study does not aim to show all the determining factors of genius, nor all the conditions required for its development; it merely seeks to show that they are numerous. The British national biographies furnished the data for study. The author states that the difficulties encountered were due to the defective nature of the material and to the lack of adequate normal standards of comparison. The main part of the book is taken up with the coördination and summation of the data gathered. In his concluding remarks the author cites a number of conditions which "clearly appear among the influences highly favorable" to the development of genius. Such a condition seems to be the great reproductive activity of the parents, the child destined to attain intellectual eminence in many cases alone surviving. "The fact of being either the youngest or the eldest child is a condition favorable for subsequent intellectual eminence." . . . There seems, also, to be a tendency for "children who develop genius to be of feeble health, or otherwise disabled, during the period of physical development." The book includes insertions, in small type, of results obtained by previous investigation on similar bodies of data. An appendix containing the elementary facts of the study is given.—*M. Goodrie (Clark)*.

1594. **Hough, W.** *Fire as an agent in human culture*. *Bull. U. S. National Museum*, No. 139. Washington: Government Printing Office, 1926. Pp. xiv

+ 270. \$0.50.—A compendious account of the history and ethnography of fire as used by man. No theoretical discussion. The paper contains 41 pages of illustrations.—*W. S. Hunter* (Clark).

1595. **Koehne, K.** *Untersuchungen über Vorläufer und Quellen der Rassen-theorie des Grafen Gobineau.* (Investigations concerning the precursors and sources of Count Gobineau's theory of races.) *Arch. f. Rassen- und Gesellschaftsbiol.*, 1926, **18**, 369–398.—Contrary to the usual point of view, according to which Count Gobineau is held to be the originator of the biological conception of history (Scheidt—Munich), Benjamin Disraeli, afterward Lord Beaconsfield, the well known English statesman and poet and one of the eugenistic philosophers of history and of the state, is here shown as the precursor and inspirer of Gobineau; Seillere, incidentally, has already called attention to a certain similarity between a remark in Disraeli's novel, "Coningsby," and the ideas of the Count. Besides this novel, "Tancred" and "The biography of Lord Bentinck," and other works, are also considered. Personal relations between the two authors are regarded as certain, and the character of Phoebus in Disraeli's "Lothair" is drawn entirely according to Gobineau.—*W. Wirth* (Leipzig).

1596. **Lenes, N. J.** *Whither democracy?* New York and London: Harper, 1927. Pp. xi + 370. \$3.00.—A purely speculative study, the chief purpose of which is to trace some of the influences of democracy on our social evolution. In Part 1 a study is made of the "occupational scale;" of the variation in inborn intelligence; and of the rôle which democracy plays in placing the individual in the occupational scale according to his mental equipment and the work he is to do. The arguments advanced all bear on the following proposition: "In proportion as the ideals of democracy are realized in practice, in that proportion does each worker tend to reach that point in the occupational scale which is best suited to his native talents." Part 2 deals chiefly with a discussion of the "evolution of an occupational stratification as it takes place over a series of generations." As a preparation for this a study is made of heredity and the evidence that seems to show that mental qualities are inherited according to the same laws as physical qualities. A study is also made of social classes in order to determine to what extent they correspond to occupational classes and what is the frequency of inter-marriage between different social groups. The conclusion of Part 2 is the main thesis of the book: "In proportion as the ideals of democracy are realized in practice, in that proportion does society tend to become divided into occupational classes with hereditary membership." In Part 3 a presentation is made of facts which seem to show that the process implied in Parts 1 and 2 has already brought about significant results. A short closing chapter presents a number of suggested questions and problems for further investigation.—*M. Goodrie* (Clark).

1597. **McAdoo, W.** *Causes and mechanisms of prevalent crimes.* *Scient. Mo.*, 1927, **24**, 415–420.—The bulk of the crimes in the United States are committed by men between 16 and 26 who are fundamentally heartless and cowardly instead of sympathetic, and who can hardly be reformed by any punishment. It is suggested that a great custodial institution is needed for these men to keep them out of society permanently if need be. The speedy automobile and especially the pistol are the tools of crime, and the distribution of the latter is a grave menace.—*J. F. Dashiell* (North Carolina).

1598. **Murchison, C.** *Criminal intelligence*. Worcester: Clark University, 1926. Pp. 291. \$4.00.—The data which Murchison discusses were secured by giving the Army Alpha test to inmates of penitentiaries in Ohio, Illinois, Indiana, New Jersey and Maryland, and his method of treating the data is that of comparing distributions of the delinquents' scores with distributions of scores reported in Volume 15, *Memoirs of the National Academy of Sciences*. Five groups of adult criminals were tested: white native born men, white foreign born men, negro men, white women and negro women. The last two groups were small and there are no norms of the general population of women with which to compare them. In the case of the white native born men and negro men the following concomitants are related to intelligence: geographical, types of crime, recidivism, literacy, chronological age, occupation, religion, season, length of imprisonment, height, weight and marital condition. In the case of the white foreign born men intelligence is related to age, type of crime, recidivism, literacy and geographical concomitants. Some of Murchison's conclusions about the white native born criminals are as follows: They seem superior in terms of Alpha scores to the native white draft group; the criminals from some states are much more intelligent than are the criminals from some other states. "Men who are incarcerated outside their home state seem more intelligent than are the men incarcerated within their home state." Crimes of fraud are committed by superior individuals, crimes against sex by inferior individuals, and crimes of social dereliction by both the unusually superior and the unusually inferior individuals. Like other investigators Murchison finds that the criminal group is relatively youthful. The older men are more literate and more intelligent and tend chiefly to commit crimes of fraud. The findings in regard to the foreign born whites and the negroes are in some respects like those in regard to the native born whites. Particularly interesting is the difference between Northern and Western negroes in types of crimes. It appears that as regards crimes of force and crimes of physical injury there is the same contrast as is found between Southern European criminals and Northern and Western European criminals. In the last chapter the author advocates the abolition of the indeterminate sentence, parole, probation and release on bond and recommends that "the third penitentiary conviction carry an automatic death penalty." The reader may seek in vain for any justification in Murchison's data for any ground for such statements, which are at variance with all the findings of modern psychology and criminology.—*J. L. Holmes* (Columbia).

1599. **von Henting, H.** *Die kriminellen Tendenzen der Blinden*. (The criminal tendencies of the blind.) *Schweiz. Zsch. f. Strafrecht*, 1927, 40, Part 1.—The misdemeanors of the blind, in spite of numerous criminal tendencies—caused by a strong drive toward compensation, a lack of being understood, and ideas of reference—suggest the existence of inhibitory factors, among which the most important are hampered motor responses and asthenic constitution.—*R. Meili* (Geneva).

[See also abstracts 1462, 1464, 1479, 1502, 1504, 1506, 1523, 1541, 1559, 1577, 1584, 1616, 1620, 1632, 1642.]

INDUSTRIAL AND PERSONNEL PROBLEMS

1600. **Bills, M. A.** Permanence of men and women office workers. *J. Person. Res.*, 1927, 5, 402-404.—This is a report on the comparative stability of 635 men and women office workers hired by the Aetna Life Insurance Company from 1920 to 1923 inclusive. Relative stability is measured by comparing proportions remaining with the firm and average length of service of those who left the firm. Almost equal percentages of men and women hired were still with the firm up to the time of this report (25% of men and 26% of women). Of those who left the firm the women exceeded the men by about a fourth of a year in average length of service.—(From *J. Person. Res.*)

1601. **Bills, M. A.** Stability of office workers and age at employment. *J. Person. Res.*, 1927, 5, 475-477.—Records of 196 men and 420 women office workers hired by the Aetna Life Insurance Company in 1920, 1921, 1922, and 1923, were studied to trace the influence of age at employment on permanency of service with the firm. It was found that of men under 19 years of age at employment, 17% were still with the firm in December, 1926; of those between 19 and 25, 27%; and of those over 25, 54%. The corresponding figures for women were 29, 19, and 37%. Various theories are given to account for these results.—(From *J. Person. Res.*)

1602. **Brown, M. R.** Legal psychology. Indianapolis: Bobbs-Merrill, 1926. Pp. x + 346. \$5.00.—The aim of the author has been to collect and explain those principles of applied psychology which are of benefit to the legal profession, and the choice of material has been governed by what was thought to be useful to the practicing lawyer. The author has endeavored to present the psychological principles underlying the successful appeal, presentation of the appeal, selection of judge and jury, presentation of evidence, etc. The book is divided into four parts; introduction, trial psychology, criminal psychology, and personal psychology. It contains the following chapters: the appeal; presenting the appeal; the judge and the jury; evidence; the child and the woman; crime and its treatment; some important mental states and processes; words. The book contains a nine page bibliography.—*J. R. Liggett* (Clark).

1603. **Fontègne, J.** Monographies professionnelles. (Professional monographs.) Paris: Eyrolle (Bibliothèque d'orientation professionnelle, No. 2), 1926. Pp. 150.—After a short note for the vocational counsellor, the author states, for each vocation, its object, the necessary physical abilities, the desirable psychical, intellectual, and moral requirements, and the essential school preparation. He points out the advantages and disadvantages of the vocation, the length of apprenticeship, and the future possibilities in it. 50 vocations are thus reviewed, comprising 5 concerned with food, 10 with construction, 8 with clothing, 4 with woodwork, 9 with ironwork, 7 with art and books, and 5 with the textile industry.—*Math. H. Piéron* (Sorbonne).

1604. **Hoopingarner, N. L.** Personality and business ability analysis. Chicago: Shaw, 1927. Pp. 89. \$5.00.—A manual for personal diagnosis of personality and business ability, which has been especially prepared for three fields of application: (1) the individual, to give him an understanding of himself; (2) the employer, for use in selecting, training, and supervising men for responsible positions; and (3) colleges and universities, for use in vocational guidance. The book consists of three sections. Section 1 contains twelve business personality

tests designed to measure the following traits: impressiveness, initiative, thoroughness, observation, concentration, constructive imagination, decision, adaptability, leadership, organizing ability, expression, and knowledge. Much of the test material is objective, but some of it consists of questions requiring the subject to estimate his own abilities. The test is self-administered and requires about two hours for completion. Section 2 comprises a key for scoring the tests, and instructions for charting the results. The individual's score can thus be compared with the average. Section 3 gives an analysis of interests and business aptitudes, emphasizing the five types of business personality, namely: mechanical, persuasive, analytical, conservative, and managerial or executive. It attempts to get at certain general information about the subject, his education and technical training, experience, vocational tendencies, avocational interests, interests of relatives, occupational choices, and his ultimate goal in life. In the summary is discussed the place of a program in the development of business personality.—A. T. Landis (Smith).

1605. **Merrill, M. A. Intelligence of policemen.** *J. Person. Res.*, 1927, 5, 511-515.—The 113 applicants for positions on the police force of Palo Alto, California, from July, 1924, to July, 1926, averaged 104.2 in Army Alpha. Only 33% were drawn from occupations which are rated lower than policeman from the standpoint of the intelligence level required for success, while 57% were from occupations rated higher. Thirty of the applicants were given appointments. Preference was given to men who obtained high Alpha scores and who made a favorable impression in a personal interview. Of the men selected, 12 were subsequently discharged, 4 left voluntarily, and 14 survived. Compared with the total number given appointments, those who survived averaged slightly higher in schooling (10.4 years) and in Alpha scores (143.5), and those who were discharged slightly lower in schooling (8.5 years) and practically the same in Alpha scores (137.0). Those who left voluntarily averaged 1.5 years in college and 171.5 in Alpha. The policeman's job in this community attracts an intelligent type of man, considerably above the average of policemen in large cities. There nevertheless appears to be an upper limit of intelligence for stability at this job.—(From *J. Person. Res.*)

1606. **Miller, L. R. Why employees leave: company records and analysis of causes of exits.** *J. Person. Res.*, 1926, 5, 298-305.—This paper discusses the practice of systematically obtaining and recording reasons for exits and then taking whatever action is necessary. Experience has shown the following results of this practice: (1) prevention of arbitrary discharge by foremen or department heads and better understanding of way to handle men; (2) disclosure of personal grievances and misunderstandings; (3) reduction of turnover due to improper selection and placement; (4) exposure of unsatisfactory personal, home, and community conditions, some of which can be corrected; (6) development of employee good will. Reference is made to the increasing number of firms using the exit interview. Reasons are given for its failure to produce results in some companies.—(From *J. Person. Res.*)

1607. **Pond, M. Selective placement of metal workers. I. Preliminary studies.** *J. Person. Res.*, 1927, 5, 345-368.—This investigation of the use of intelligence tests in the selection of factory workers was made in a New England brass factory. Eight tests were tried out, seven of them taken from the Army series, and one entirely new. The tests were given to all newly hired workers

over a period of a year, though the placement of the men was not affected by their scores. In order to evaluate the tests for groups doing comparable work, the employees tested were divided into a number of occupational classes based upon their tasks. As criteria for the evaluation of the tests the author used (1) highest weekly pay, (2) increase in earnings, (3) foremen's ratings, and (4) terminations. No marked agreement was found between earnings, foremen's ratings, and length of service. Interviewers' and examiners' ratings correlated low with foremen's ratings and earnings. Correlations between test scores and factory criteria of success were also very low. Using as her criterion terminations for reasons other than lack of work, expressed in percentages of employees hired, the author found significant preferred ranges or critical sections in test scores in nine out of twenty-nine occupational groups. The proportion of terminations was considerably less for those whose scores fell within these preferred ranges of test scores. Similar preferred ranges were set off with foremen's ratings as a criterion.—(From *J. Person. Res.*)

1608. Pond, M. **Selective placement of metal workers. II. Development of scales for placement.** *J. Person. Res.*, 1927, 5, 405-417.—Continuing the account begun in this journal, the author describes the second year's investigations of measuring instruments for the selection of metal workers. The research program was elaborated, with changes in procedure, increase in number of subjects, and changes in treatment of records. Data from 3184 employees were analyzed. The criterion of success was the employee's ability and willingness to stay on the job for at least six months. Critical scores and preferred ranges were set off in a number of intelligence tests and personal history items for each of 65 occupational groups. Scales based on total scores are in use provisionally at the Scovill Manufacturing Company for selecting employees for these occupations. Preferred ranges in tests and personal history items vary so widely for the different occupations that almost every applicant qualifies for one or more of these occupations. Thus no injustice is done to the applicant and no manpower is lost to the firm.—(From *J. Person. Res.*)

1609. Pond, M. **Selective placement of metal workers. III. Selection of toolmaking apprentices.** *J. Person. Res.*, 1927, 5, 452-466.—This special study of toolmaking apprentices was part of the general investigation of intelligence tests for employment in the Scovill Manufacturing Company. Eight tests and a personal history questionnaire were given to three separate groups of apprentices. As a criterion of the success of these boys the author used ratings by foremen expressed in four degrees,—excellent, good, poor, and very poor. Those rated as excellent or good were considered satisfactory, while those rated poor or very poor were considered unsatisfactory. Each test was evaluated by determining if preferred ranges of test scores could be set off, in which the per cent. of satisfactory workers was significantly higher than in the group as a whole. This could be done for scores in five non-verbal tests, errors in one of them, and age. A total score was obtained for these significant measures, and preferred ranges were again worked out. The per cent. of satisfactory workers in the preferred range for total scores was 82, in the non-preferred range 23, while among all the apprentices tested it was 60. Rigorous use of this selective device for a year has reduced the number of unteachable apprentices among those hired from 18% to zero.—(From *J. Person. Res.*)

1610. **Shellow, S. M.** An intelligence test for stenographers. *J. Person. Res.*, 1926, 5, 306-308.—The author describes an intelligence test which was devised for the purpose of supplementing a trade test for the selection of stenographers. 24 stenographers served as subjects. The criterion was a ranking by an examiner who knew their work at first hand and who took into account salary earned, difficulty of work handled, and opinions of department heads. Correlations obtained were: intelligence test with ranking 0.73, trade test with ranking 0.48, intelligence test with trade test 0.12, and both tests combined with ranking 0.59.—(From *J. Person. Res.*)

1611. **Sherman, M.** A review of industrial psychiatry. *Amer. J. Psychiat.*, 1927, 6, 701-710.—The stimulus to the development of industrial psychiatry came primarily from the work of the psychologists in the industrial field; many problems of maladjustment cannot be met by examinations of intelligence and capacities alone—personality is as significant as intelligence in many problems arising in industry. The specific problems of the psychiatrist are (1) to find the cause of an individual's inability to do satisfactory work when the psychologist finds no discrepancies, and (2) to develop suitable interests and incentives in every worker in order to forestall maladjustment. The individual is studied not only from the standpoint of the situation in which he is found at work, but also from that of the possibility of the development of conflicts. The problem of vocational guidance is regarded by many psychoanalysts as fundamental in the study of industrial relations, and some emphasize the importance in vocational adjustment of certain "drives" developed early in life. Elton Mayo believes that certain types of reverie lead to interference with the demands of one's work. Pratt classifies the maladjusted individuals studied as feeble-minded, "superior" to the job, psychopaths, and psychotic. Pruette and Fryer make two classes, the repressed and the elated. Vocational guidance is as important a factor in obviating industrial maladjustment as the actual psychiatric treatment "on the job." The most successful procedure in readjusting individuals is that which attempts to analyze the "total" situation. The psychologist, with his objective methods in measuring an individual's capacities, can be of immeasurable help to the psychiatrist.—*B. Kendall* (Boston Psychopathic Hospital).

1612. **Unger, E. W.** Vocational training for subnormal girls; an experiment in the garment machine operating trade. *J. Person. Res.*, 1926, 5, 243-255.—118 subnormal girls were given some training on operating machines for making garments. They were studied with respect to social and economic status, intelligence and success on a team of tests. 22% were judged by the teacher to be able to succeed in work of this kind. On the basis of this experiment it is recommended that no attempt should be made to train for the garment machine trades any subnormal girl (a) with a mental age below 8 years or an I.Q. below 50, (b) who shows visible signs of mental retardation, (c) who shows emotional instability, (d) who has an inferior personality make-up, (e) who achieves a score of less than 250 on the team of tests here described.—*H. D. Kitson* (Columbia).

1613. **Walther, L.** La technopsychologie du travail industriel. Collection d'actualités pédagogiques. (Psychotechnics of industrial work. A collection of present day pedagogical problems.) Neuchâtel-Paris: Delachaux and Niestlé, 1926. (Préface du Dr. Ed. Claparède.) Pp. 239.—Psychotechnics is the application of psychology to the solution of technical problems which present them-

selves in the organization of mechanical work. Walther's book begins with a historical sketch of the problem: in the beginning science and industry tried independently to solve the questions set by the work of man; coöperation was established only since the world war. There follows a classification of the problems which demand a psychophysiological study of mechanical work. Whether or not the solution lies in general or individual psychology, or both, the problems have to deal with the adaptation of the worker to the work, of the work to the workman, or with related problems, such as professional fatigue, training, the monotony of industrial work. The adaptation of the workman to the work suggests two problems: selection and placement. The author describes methods which enabled him to select in two establishments workwomen well adapted to the work. The adaptation of the work to the workman comprises the chapters on the division of the work according to the psychophysical constitution of the workman. The adaptation of the working process to the workman brings up two problems: the study of movements and time involved in the work, and the adaptation of the tools to the man. The theoretical account of the method which allows for increased output on the part of the workman is followed by a description of the results obtained by the author himself in factories. The application of psychological laws to the study of work-movements enabled him to increase production in the manufacture of a box of bonbons from 86 to 150 pieces per hour without speeding up the rhythm of work. The study of the intercalation of rest periods (problem of industrial fatigue) has added to these significant results. The introduction of a rest of 5 minutes every hour for workers at a stamping machine increased the product of the workwoman from 4200 to 4767 pieces per hour. In another piece of work the intercalation of a rest period of 2 minutes every quarter-hour caused the production to go up from 6000 to 8000 pieces per day. At the end of Walther's work is given a rather complete bibliography of the works studied in connection with the problem.—*R. Meili* (Geneva).

1614. **Wetzel, —. L'éclairage dans l'industrie.** (Illumination in industry.) *Recherches et inventions*, 1927, 8, 81–95.—In each profession a minimum of visual acuity is required, below which there is professional blindness. After referring to variations of visual acuity as a function of lighting, the author shows that the gains in visual acuity are very perceptible up to about 40 candle-power. He also studies visual rapidity (the reciprocal of the time necessary for an object to become perceptible in a given light) and shows that it is advantageous to increase the illumination considerably above 40 candle-power. Good lighting increases the speed of accommodation and the continuity of vision (the ability to discern an object clearly during an observation of a certain duration—ordinarily 3 minutes. The author then discusses different experiments performed in America for the purpose of investigating rational lighting.—*Math. H. Piéron* (Sorbonne).

[See also abstract 1457.]

CHILDHOOD AND ADOLESCENCE

1615. **Bonnis, L. Le développement de l'intelligence chez les arriérés.** (The development of intelligence in backward children.) Vannes: Commelin, 1926. Pp. 70.—Application of the Binet-Simon method to the establishment of a more precise diagnosis of backward children. The author studies modifications

in the abilities of the backward appearing with increasing age, with the object of obtaining a precise classification. The children under examination were all abnormal, ranging from the merely backward to those with mental or character disturbances. All of them were examined several times at intervals of more than a year, and a record made for each child for each examination covering the following topics: his mental level, his backwardness, his intelligence quotient, and also a chart showing his degree of backwardness (distance between his growth curve and that of the normal child) and his mental evolution curve. The author combines and analyzes the individual charts, computing the yearly gain (i.e., the average progress) for each group of children who were of the same age and level at the beginning of the year. In this way he obtained different level-curves, enabling him to establish categories of mental backwardness. This chart divides the children into: normal, average mental level (A. M. L.) 13½ years; high-grade morons, A. M. L. 10 years; low-grade morons, A. M. L. 9 years; high-grade imbeciles, A. M. L. 7 years; low-grade imbeciles, A. M. L. 5 years; idiots, A. M. L. 2 years. Studying these curves, we find that progress grows less in proportion as the child completes his development, and that the greater his backwardness the earlier the slowing up occurs. Having examined a backward child and having looked up his place on the general curve, we may then possibly foresee his development. No bibliography.—*Math. H. Piéron* (Sorbonne).

1616. **Gtaborinsky, —** *La protection des enfants arriérés et anormaux en Russie.* (The protection of backward and abnormal children in Russia.) *Prophyl. ment.*, 1926, 2, 236-237.—A simple documentary note: In Russia there exist at present 211 institutions sheltering 8226 abnormal children, to whom an attempt is made to adapt the latest and best suited medico-pedagogical methods in order to develop and improve their personalities.—*Math. H. Piéron* (Sorbonne).

1617. **Jones, M. C.** *The development of early behavior patterns in young children.* *Ped. Sem.*, 1926, 33, 537-585.—365 babies from middle class Americans, an Italian population, and a negro population, were given systematized observations under experimentally controlled conditions, with the purpose of obtaining age norms and periods of development for several early behavior patterns. Smiling: the youngest child to smile in the prescribed situation was 36 days of age; the response appeared in 100% of the children of 90 days' age or older. Eye-coördination (3 types): responses noted at ages ranging from 33 to 130 days, the horizontal coördination appearing first and the vertical and circular later, within these age limits. Blinking: to a visual stimulus was first elicited on the 46th day; present in all children by the 124th day. Whether this response is due to maturation, to conditioning, or to both is not known. Thumb opposition: earliest occurrence on the 108th day; found in 100% of cases by the 266th day. Reaching: earliest occurrence was at 116 days; found in 100% of cases by the 269th day. Boys showed slightly earlier development of this pattern. Sitting: earliest occurrence at 150 days; 100% of cases by the 280th day. Head support: no results, due to faulty technique. Babinski reflex: results obtained were similar to those of Watson. In general, sex and race differences were slight and unreliable.—*J. F. Dashiell* (North Carolina).

1618. **Meyer, H. D.** *Pre-school child study programs.* *Univ. N. C. Bull.*, 1927, 6, No. 11. Pp. 84. \$0.50.—Contains aids and suggestions for program making for groups studying the pre-school child. 20 possible programs are out-

lined in detail. Detailed suggestions are made as to how the programs can be supplemented by the sponsoring of profitable undertakings, such as the organization of day nurseries, health clinics, etc. A description is given of the different national social agencies which render service to the home and family. There is a bibliography of selected books of value to parents and teachers.—*M. Goodrie* (Clark).

1619. **Thompson, T. M.** A baby's nursing difficulties. *Ped. Sem.*, 1926, 33, 709-716.—A case study shows that a new-born infant's nursing reflexes may be insufficiently developed and must be artificially assisted if they are not to grow weaker and lead to starvation.—*J. F. Dashiell* (North Carolina).

1620. **Tudor-Hart, B. E.** Are there cases in which lies are necessary? *Ped. Sem.*, 1926, 33, 586-641.—School children of Vienna under 12 years of age and of America between 10 and 20 were asked the question given in the above title. Allowing for certain unreliabilities of method used, it may still be concluded that while younger children rely largely upon verbal precepts taught them, older ones answer more from personal experience and observation of adult behavior.—*J. E. Dashiell* (North Carolina).

1621. **Volckelt, H.** Fortschritte der experimentellen Kinderpsychologie. (Progress in experimental child psychology.) Jena: Fischer, 1926. Also in *Ber. ü. d. IX. Kong. f. exp. Psychol. in München*. Pp. 55.—A detailed report of the most significant European researches on children during the last 10 or 15 years. The following studies are summarized: S. Canestrini, *Über das Sinnesleben des Neugeborenen*, 1913: the kymograph curves of respiration and fontanelle pulse in a 7-day-old infant showed a marked flattening while the mother whispered to it, but strange voices had no effect. C. W. Valentine, *The colour perception and colour preferences of an infant during its fourth and eighth months*, 1914: measuring the times during which an infant's gaze is fixed on each of a pair of colors shows marked differences in preference; adding the times for each color in all the comparisons into which it enters, the order of preference becomes yellow, white, pink, red, brown, black, green, blue, violet. W. Köhler, *Nachweis einfacher Strukturfunction beim Schimpansen und beim Haushuhn*, 1918, and E. R. Jaensch, *Einige allgemeinere Fragen der Psychologie und Biologie des Denkens*, 1920: chickens, chimpanzees, and children, having learned to choose light gray in preference to dark gray, will without further learning choose white in preference to the same light gray, and the same dark gray in preference to black. J. Peiser, *Prüfungen höherer Gehirnfunktionen bei Kleinkindern*, 1920, and K. Bühler, *Die geistige Entwicklung des Kindes*, 1924: children of 9 months and 1¾ years learned suddenly, after leaving the combination untouched for a long time, to get possession of a tidbit by pulling a string attached to it. H. Volckelt and D. Musold (reference not given): the variability of judgments of comparative size is greater for lines than for circles, and greater for circles than for spheres, for all ages and for all of these classes of objects; the variability of kindergarten children's judgments is greater than that of adults, and greater for adults than for older children. H. Giering: *Das Augenmass bei Schulkindern*, 1905: in the illusion in which the outer of one pair of concentric circles is of the same size as the inner of another pair, the underestimation was markedly greater with children than with adults. M. Gräfin v. Kuenburg, *Über Abstraktionsfähigkeit und die Entstellung von Relationen beim vorschulpflichtigem Kinde*, 1920: given two pairs of unfamiliar forms,

only 15% of children about 3 years old could select from the second pair a form like one of those in the first; but upon presenting the child with the figure to be compared, the percentage of successes rose to 77. D. Katz, *Studien zur Kinderpsychologie*, 1915; A. Descoeudres, *Couleur, forme ou nombre?* 1914; and H. Volkelt (reference not given): in experiments arranged to give equal determining weight to form and color, likenesses between objects are seen in terms of color (predominantly; an exception is the case of familiar objects), even when the resemblance in form is exact, that in color slight, and suggestions favoring the form are given. H. Volkelt, *Primitive Komplexqualitäten in Kinderzeichnungen*, 1924: children's drawings, both of two- and three-dimensional forms, show wide variations in the degree of adherence to pattern; a notable feature is the frequent addition of pointed strokes to the original. Examples of plastic art and block building are shown. A. Descoeudres, *Le développement de l'enfant de deux à sept ans*, 1921: language is found to be richer at an earlier stage than heretofore recognized. A form of lotto in which pictures of objects of different colors are used is played more rapidly than a form using all the same color. H. Beckmann, *Die Entwicklung der Zahlleistung bei 2 bis 6 jährigen Kindern*, 1923: the earliest number ability is that of repeating the name of a number presented; it is followed considerably later by the ability to distinguish and pick out numbers, and still later by that of spontaneous naming of numbers. N. Ach, *Über die Begriffsbildung*, 1921: children 5-8 years old can readily learn to associate nonsense words with geometric forms, e.g., cubes and cylinders. O. Lippman and H. Bogen, *Naive Physik*, 1923: when a grating is interposed between (a) a child with a forked pushing stick with the fork toward him, and (b) a ball and a playmate to push it to, younger children do not usually think of turning the stick around, and those a little older, after turning it around, do not think of turning it back to the horizontal plane. W. Eliasberg, *Psychologie und Pathologie der Abstraktion*, 1925: in a situation where a blue cover concealed a desired object, while a yellow one had nothing, the order of learning this association was: abnormal children, normal children, adults, psychologists; the critical sense is inferred to act as a deterrent in such a simple situation. G. Révész, *Expériences sur la mémoire topographique et sur le découverte d'un système chez des enfants et des singes inférieurs*, 1923: that the second box in a row of 5 contained candy was learned rather soon; when the candy was changed to the fourth box, the older children (6 years) adjusted very easily, the younger with considerably more difficulty. F. Sander and A. Heiss (reference not given): given a block that was part of a pattern of blocks, it proved easier (as measured by time) at all ages to pick out its equivalent from an unorganized group of such blocks than from another pattern. The differences increased with decrease in age. C. Raspe, *Kindliche Selbstbeobachtung und Theoriebildung*, 1924: 10-year-old children declared that an optical illusion presented to them was due to the "magic" operation of a metronome or an electric light brought into play simultaneously with the illusion. . . . Other names, attached to work not cited in detail, are: Asmus, Raehlmann, Krueger, Koffka, Riekkel, Lindworsky, Kerstan, Lohnert, Lenk, Kröttsch, Scheibner, Fischer, Stern, Roloff, and Spranger. The article closes with an itemized discussion of the *Gestalt* generalized conclusions that perception for the child is in terms of *wholes*, from which in the growth process the so-called "parts" are discriminated relatively slowly; and with a brief statement of the author's belief in the great significance of the *Gestalt* viewpoint to the understanding of childhood and to education.—R. R. Willoughby (Clark).

1622. **Wexberg, E.** *Your nervous child*. New York: Boni, 1927. Pp. xiv + 178. \$1.75.—A description of the nervous manifestations of the problem child, and a discussion of the causes of and possible remedy for these symptoms. The child guidance clinics in Vienna are the chief source for the facts and experience upon which the author's ideas are based. The importance of the feeling of inferiority, together with its compensatory will to power, in the nervous child is stressed. The chief factors of importance in the development of the child are discussed separately: the physical makeup of the child; his environment, which includes all the social and economic factors involved; the relationships of the "family constellation"; relationships having to do with ideas of sex; and education. A criticism is made of the education of authority and a picture given of how, when successful, it educates to dependence, the very basis of the "sickness" of nervous children. The factors necessary in the proper education of the child are freedom, independence, love, and an educated educator, whether parent or teacher. The last chapter is given to the prophylaxis and cure of nervousness in children. The chief remedial measure is correct education, in which term is implied the discarding of authoritative and over-tender education and the aiding of the child to achieve independence, courage, the desire to work, and the sense of the brotherhood of man. Suggestions are given as to how the development of these characteristics may be encouraged. The dangers and occasional legitimate use of reward and punishment are mentioned. The suggested treatment of childhood nervousness involves the engaging of a competent physician to remove all possible causes, which sometimes necessitates influencing the parents.—*M. Goodrie* (Clark).

[See also abstracts 1500, 1503, 1504, 1526, 1582, 1587, 1612, 1639, 1645.]

EDUCATIONAL PSYCHOLOGY

1623. **Abramson, J.** *L'enseignement sélectif*. (Selective instruction.) *Ann. de l'enfance*, 1927, 1, 83-86.—The author calls attention to the fact that it was France which promoted the idea—though it was not further developed there—that children of varying intellectual powers ought not to be put promiscuously into the same schools, and that the same class-work, which in reality applies to the average only, ought not to be assigned to all alike—the backward, the normal, and the advanced. The author describes two ways to solve the problem: by establishing an entirely distinct school for each group, or by trying to adapt this perfected instruction within already existing institutions. He mentions the Gary system in Berlin, the Sickinge system at Mannheim, the Pestalozzi school also at Mannheim, and the method used in the Winnetka (Illinois) public schools. The author does not consider it necessary completely to upset already existing systems in order to adapt an adequate instruction to various individualities—but three conditions must be fulfilled: (1) the creation of movable groups, making possible a maximum performance for each group; (2) an adequately prepared teaching-staff; and (3) publication of new special text-books.—*Math. H. Piéron* (Sorbonne).

1624. **Arnold, H. J.** *What parts of elementary psychology are most interesting to students?* *Ped. Sem.*, 1926, 33, 729-735.—A ballot listing the main divisions of a course in psychology was marked by students in "low" and

"medium good" sections. They agreed closely in their ratings of divisions of the course and of chapters of the text both as to "interest" and as to "value." The "interest" and the "value" ratings correlated .60.—*J. F. Dashiell* (North Carolina).

1625. **Betts, G. H.** *College students' reaction to education courses.* *School & Soc.*, 1927, 25, 494-496.—By means of a questionnaire an attempt was made at Northwestern University to discover the attitude of the students taking education toward their courses in this field. The returns indicate that the courses were considered, generally, of average difficulty. 83-93% of the students rated their courses average or above in interest, while 95.2% so rated the teaching technique used. The average preparation time for each recitation was 63 minutes. New information, rather than new interests, skills, or points of view seemed the most prominent of the conscious gains. The student's estimate of his own mastery of the subject tended to be considerably higher than that of his instructor.—*H. L. Koch* (Texas).

1626. **Bode, B. H.** *Modern educational theories.* New York: Macmillan, 1927. Pp. 351. \$1.80.—A record of the different movements and tendencies embodied in present educational thinking. Taking the democratic movement in society as embodying the ideals which should be realized in education, he reviews the theories of curriculum construction evolved of late, especially Dewey's, and criticizes them in the light of their value in realizing these ideals. "Job analysis," "Sociologically determined objectives," and the "Project method" are carefully analyzed, criticized and interpreted in the light of the contribution they give to modern democracy. A section of about 50 pages on the "New psychology of learning" is devoted to an analysis and criticism of the behavioristic interpretation of learning, in which Thorndike's hypotheses are criticized, and preference shown for Dewey's interpretation, though both are regarded as "artificial simplifications in the interests of convenience." The balance of the book endeavors to elaborate and apply the social ideal implied in the concept of democracy, and to show that education must first of all be the expression of a social program which can be appreciated and realized not by any process of scientific fact-finding but by a flexible and adjustable system. Each chapter has a short list of questions and exercises and a selected bibliography.—*H. Moore* (Mount Holyoke).

1627. **Brigham, C. C., & others.** *First annual report of the commission on scholastic aptitude tests.* New York: College Entrance Examination Board, 1926. Pp. 38.—Findings from the scholastic aptitude tests given June, 1926, to about 8,000 candidates. The composition of this group is analyzed in some detail, as are the details of scoring, etc. Nine sub-tests were used, and the scores on each were converted to a standard scale with a mean of 50 and standard deviation of 10. The girls showed significant superiority in five of the sub-tests and in the scale as a whole, and the boys in two (number abilities). Tentative attempts were made to estimate validity, with good results. Equivalent scores are given for predicting scholastic aptitude score from total score in the Otis Self-Administering Test. The results of an experiment at West Point on the split-half vs. two-form method of estimating reliability show approximate equivalence. Experimental sections, seven in number, were added to the regular test to obtain data to be used in further test construction. The committee, "at the start, finds no problem involved that does not show promise of a satisfactory empirical solution."—*R. R. Willoughby* (Clark).

1628. **Chambers, E. V.** A study of dishonesty among the students of a parochial secondary school. *Ped. Sem.*, 1926, 33, 717-728.—Questionnaire as well as observation methods revealed a high percentage of cheating (with familiar rationalizations), laxity increasing with age.—*J. F. Dashiell* (North Carolina).

1629. **Chauffour, J.** *Publicité et enseignement.* (Advertising and instruction.) *Ann. de l'enfance*, 1927, 1, 101-103.—The author makes a study of the conditions necessary for the concentration of lasting attention on a picture and the consequent purchase of the product represented. He adapts the same principles to education and seeks to discover the conditions necessary to attract the attention of the child. In some experiments the child was shown a letter of the alphabet placed in relief on a chart of objects bearing reference to it. In other experiments the chart showed only one design and the letter. He obtained much better results with this second more simple proceeding.—*Math. H. Piéron* (Sorbonne).

1630. **Claparède, Ed.** *La grandeur de Pestalozzi et le devoir q'elle impose.* (The greatness of Pestalozzi and the duty which it implies.) *Intermédiaire des éducateurs*, 1927, No. 116, 14-20.—An attempt to measure the importance of the work of Pestalozzi in the eyes of modern educators. In counting the number of pages devoted to Pestalozzi in dictionaries or treatises of contemporary pedagogy (Buisson's *Dictionnaire*, Monroe's *Cyclopedia*, Rein's *Encyclopedisches Handbuch*), and doing the same thing for 12 other great educators of the classical period, from Rabelais to Herbart, it is found that 25% of the space is given to Pestalozzi, while only 13% is given to Rousseau, 12% to Herbart, 9.2% to Froebel, 8.8% to Comenius, 5.8% to Locke, and 2% to Rabelais. This comparison shows to what degree Pestalozzi has continued to be a figure of importance in the estimation of modern pedagogy.—*Ed. Claparède* (Geneva).

1631. **Cornell, E. L.** *Mental hygiene: its place in the classroom.* *Univ. N. Y. Bull.*, No. 875, 1927. Pp. 20. \$0.50.—Designed to present to the classroom teacher a point of view and certain elementary facts about children's emotional adjustment. The latter include the concept of the child's conduct as a resultant of the interplay of his personality with his social environment; the necessity for willingness to look for causes without prejudice; a few of the principal causes of behavior difficulties, such as maladjustment of the curriculum to individual needs, emotional conflicts, etc.; and the desirability of early recognition of symptoms of maladjustment, a few of which are listed.—*R. R. Wiloughby* (Clark).

1632. **Hart, J. K.** *Light from the north.* New York: Holt, 1926. Pp. xxi + 159. \$1.50.—An account of the folk high school movement in Denmark and its significance in the development of the rural population. The aim of the folk or people's high schools, "the most intelligent educational institutions the author has come in contact with," is to awaken in their students, who range in age from 18-25, a sense of individuality and responsibility, and a desire to meet reality. There are no marks, certificates, nor degrees. There are no text books; its source materials are life and the personalities of stimulating and intelligent teachers. Attendance is voluntary; only those who can "stand the discipline that freedom entails" choose to attend, while others go to the preparatory schools and the university. The usual preparatory course for these schools is eight years of study in an elementary school and work in the village community during the years between the ages of 14 and 18. The schools are free from state control, but

receive part of their support from the state. The spirit infused into the national life by the people's high schools is said to have been the chief controlling factor in the unprecedented advance and prosperity in Denmark; it has enabled Denmark to rise, in the short period of 60 years, from a condition of peasantry to industrial, intellectual, and moral independence. A picture is given of the civilization of the Danish countryside and the use which the people's high schools have made of the elements of this civilization. A few comparisons are made between Denmark and America in this connection. A brief sketch is given of the earlier history of the schools and the life histories of their two chief leaders. The book closes with the possible implications of the Danish educational achievement for America.—*M. Goodrie* (Clark).

1633. **Hart, J. K.** *Adult education*. New York: Crowell, 1927. Pp. xiii + 341. \$2.75.—“Adults” are here persons 18 to 25 years old or thereabouts. The thesis, which was developed through observations of the Danish folk high schools, is that (1) the child must always lose (for lack, chiefly, of economic power) in his struggle to maintain his individuality and exercise his intelligence in the face of the adult community's insistence on the maintenance of established folkways; (2) the older adult is notoriously opposed to the amelioration of anything; but (3) the younger adult may, by his incipient economic power, win his fight to consider the world and his problems rationally, and, having won it, is not too old to derive from such a view a larger outlook and comparatively unhampered modes of action. The volume is essentially an educational philosophy, and is equipped with chapter references, a bibliography, and discussion questions, so that it may be used as a text if desired. Its viewpoint, however, is far broader than that of the average educational philosophy, since it endeavors, not to find justifications for current practices, but to criticize these practices impartially with a view to determining their social significance. Of special interest to scientists in general is the comment that one of their distinguishing marks is the absence of the scientific spirit in their conduct of life; and to psychologists in particular, a chapter on the current (predominantly Thorndikian) educational psychology, which in effect denies any place to interest in learning, and posits as a central assumption that education is something “given” to a pupil more or less without his knowledge or even against his will; a less one-sided psychology is outlined in its broad aspects.—*R. R. Willoughby* (Clark).

1634. **Jeudon, R.** *Les débuts du latin et du grec*. (First steps in Latin and Greek.) *Ann. de l'enfance*, 1927, 1, 98–101.—The author describes the evolution of the teaching of Latin and Greek, and states that with child psychology as a basis, syntax ought to be based on the method of abstract interest centers, and the morphological part on phonetics. The author was thus able to teach Latin to an unstable pupil by means of counters of 3 colors, one for roots, another for tense-characteristics, and the third for the case-endings.—*Math. H. Piéron* (Sorbonne).

1635. **Nouce, M.** *Notes relatives à la lecture*. (Observations on reading.) *Ann. de l'enfance*, 1927, 1, 86–94.—Is there any preferable reading method for children? The phonetic analytical method is generally very successful, especially when supported by the phonomimic method. The global or synthetic method, which is supported by Decroly, does not seem, the author says, any better than that first mentioned. This method was applied (1) with a very intelligent 5-year-old boy, (2) for three years with pupils of a preparatory course,

normal, middle class children, (3) for another 3 years in an opportunity class of children of average environment mentally retarded from $1\frac{1}{2}$ to 5 years. The author obtained very good results with the global method for the intelligent boy. In the preparatory course the trial was made during 4 months of the first year. The results were poor, and the author fell back on the phonetic method. At the end of the school year the children had recovered the 4 lost months and 27 out of 34 could be promoted. In the following year the same experiment was made, but supplemented by the phonetic method, with good results, from which the author feels justified in concluding that the synthetic method together with auditory exercises brings about excellent results, especially if the reading is adapted as closely as possible to centers of interest.—*Math. H. Piéron* (Sorbonne).

1636. **Reed, H. B.** *Psychology of elementary school subjects*. Boston: Ginn, 1927. Pp. x + 481. \$2.00.—The author summarizes, organizes, and interprets many of the noteworthy studies in the field of elementary education which have been published during the last decade. Modern pedagogical procedure, including determination of objective, analysis and evaluation of material to be taught, tests of ability and achievement, and statistical summaries and comparisons, is described in detail for the seven leading subjects in the elementary school curriculum. A bibliography of the special subject follows each chapter. Nearly 300 significant studies are listed and briefly described.—*E. A. Collamore* (Clark).

1637. **Ruch, G. M., DeGraff, M. H., Gordon, W. E., McGregor, J. B., Maupin, N., & Murdock, J. R.** *Objective examination methods in the social studies*. Chicago: Scott, Foresman, 1926. Pp. vii + 116.—Dissertations, so grouped as to evaluate comparatively the merits or demerits of the subjective and objective types of social-science examinations. The reliabilities of official eighth-grade examinations from eleven states under the usual conditions were found to average .38; these are, therefore, "largely invalid." A comparable figure for the New York Regents' Examinations is .40, which may be raised to .65 by casting the same examinations into objective form. It is urged, however, that these results "are not to be taken as criticisms of the examinations." An investigation of the merits of different objective forms of test results favorably to the recall type, on the basis of reliability, difficulty, and economy of time; and unfavorably to the true-false. The evidence also indicates clearly that reliability is enhanced by instructing the subject not to guess, and less clearly that correction for chance should be made pending more satisfactory technique. A chapter on "matching" tests gives some slight evidence for dividing these into groups of 10 to 15 items. A chapter on history tests concludes that four or five have satisfactory reliability, but do not measure the same abilities to any considerable extent. The results of some of the studies may also be consulted in a preliminary report in *Stud. Educ.*, 1926, No. 15, 108-119.—*R. R. Willoughby* (Clark).

1638. **Velez, D. M.** *Enseignement de la lecture et de l'écriture commune aux aveugles*. (Instruction for the blind in the ordinary sort of reading and writing.) *Ann. d'ocul.*, 1927, 164, 56-63.—The method of Braille, now in general use, is a great improvement over the older raised-letter system of printing for the blind, for it is less costly to print, and take up less space. But it is an arbitrary system, and it leaves the blind unable to communicate in writing with any but their fellows who also have learned the Braille. The proposed system seeks to incorporate the desirable features of the older system with those of the Braille; the common characters of the alphabet are employed, but they are out-

lined in perforations; this means that the blind in learning the system become familiar with the forms of ordinary letters, and will thus be able to write in the common system.—*E. G. Wever* (California).

1639. **Webb, P. E.** **A study of geometric abilities among boys and girls of equal mental abilities.** *J. Educ. Res.*, 1927, **15**, 256–262.—High school pupils in California (410 boys and 349 girls) were given the Terman Group Test and the Webb Geometry Tests, Forms A and B. The results show that when boys and girls of equal mental ability are compared boys as a group are superior to girls in geometric ability. This superiority of boys seems to be the most marked at the lower mental age levels. Girls, in general, attain one more year of mental maturity before their achievement in geometry is equal to that of boys.—*S. W. Fernberger* (Pennsylvania).

[See also abstracts 1603, 1645.]

MENTAL TESTS

1640. **De Weerd, E. H.** **The transfer effect of practice in related functions upon a group intelligence test.** *School & Soc.*, 1927, **25**, 438–440.—A group of 45 children between initial test and retest with the Illinois Examination I, Form I, practiced for 11 days and a total time of 260 minutes on substitution, multiplication, reading, cancellation, and synonym-antonym tests. The Illinois Examination resembles this series only in that it contains a synonym-antonym test and a substitution test which reverses the direction of the substitution. A control group, matched individually with the members of the above or practice group, took merely the Illinois Examination and the retest after an appropriate interval. The retest of both groups shows marked practice effects. Since, when the analogies test is eliminated, the two groups make about equal gains, the author asserts that non-specific practice fails to transfer in a marked degree to the group intelligence test. It is essential in evaluating group intelligence-test results, however, to take into account any previous experience with the test itself or with elements identical with those in the test—i.e., one must reckon with specific practice effects.—*H. L. Koch* (Texas).

1641. **Martin, L. J.** **Group tests made to yield individual diagnosis.** San Francisco: Harr Wagner Publ. Co., 1927. Pp. 31.—A report on a diagnostic and therapeutic application of mental tests. The first few pages are given over to reports on the findings of the psychological examination of three children—one normal, one subnormal, and one superior—all of whom were given the Stanford Revision of the Binet-Simon Intelligence Tests. A detailed account is then given of the application of group tests to 163 boys taking shop work and manual training in the Polytechnic High School in San Francisco. The tests used were the Terman Group Tests and the Stenquist Mechanical Aptitude Test 1; on the back of each Terman examination form were typed Fernald's ethical test, a quality test, and a questionnaire on points having an educational bearing. An analysis was made of the results of each of the tests with the aim of determining the individual strengths and weaknesses of the subjects. Ten-minute interviews were then held with each of the boys in order to form an opinion of the correctness of the conclusions arrived at from the test and to give the boys advice. The tabulated results of one of the classes tested, thought to be representative of the

results from all the classes, are reproduced. 21 cases are given to illustrate how much can be learned in a personal way about those taking the tests.—*M. Goodrie* (Clark).

1642. **Mead, M.** *Group intelligence tests and linguistic disability among Italian children.* *School & Soc.*, 1927, 25, 465-468.—A comparison is attempted of the performance on the Otis Group Intelligence Test, Advanced Examination, Forms A and B, of 160 American children in grades 6 to 10 and a group of 276 children in the same grades who came from homes where Italian was spoken to a greater or less degree. Forty-three Italians were also given the Stanford-Binet test. The influence upon intelligence test scores of social status, amount of English spoken in the home, length of parental residence in the United States, and parental occupation, as well as the interrelationships of these various factors, are considered. It is demonstrated that linguistic and social factors handicap the Italian child in the Otis tests. It is also noted that Italian children rated on the basis of the Stanford-Binet vocabulary test fell, on the average, 28 months below their rating on the total scale.—*H. L. Koch* (Texas).

1643. **Penning, K.** *Vom "Intelligenzalter" zum "Entwicklungsalter."* (From "mental age" to "development age.") *Zsch. f. päd. Psychol.*, 1927, 28, 36-43.—This article is a summary of a study which was originally published in the form of a monograph. The author has followed a method used by Professor Rudolph Martin for determining norms of physical growth and has applied it to measures of mental development. The method is to indicate on a diagram the median score, and the multiples of the standard deviation above and below the median for each test which was applied. The units are adjusted so that the same distance represents the standard deviations of the different tests. The diagram is then used to plot the stage of advancement of the child in the various abilities which are tested.—*F. N. Freeman* (Chicago).

1644. **Wells, F. L.** *Mental tests in clinical practice.* New York: World Book, 1927. Pp. x + 315. \$2.16.—The author presents a psychometric handbook for students entering the field of advanced psychological research or clinical service. The book is based upon sound laboratory technique, gained from some years of practical experience in the department of psychology at the Boston Psychopathic Hospital. It consists of 12 chapters dealing with such subjects as general examination methods, properties of intelligence tests, group and performance tests, methods of memory examination for psychotic cases, free association experiments, vocational problems, personality study, and clinical records. Valuable case history material is included to show how various tests bear upon the treatment of problem cases. The practical suggestions given in the bibliographies, questions, answers, and appendix render the book especially useful as a text for college classes. Combining a careful exposition of clinical methods with a wealth of illustrations gained from the author's background of psychological experience, the text is certain to prove invaluable to the practical clinician, court, or personnel worker, as well as to students in training for clinical service. The wide range of mental tests covered and practical suggestions offered, as well as the humane point of view, gains for the book at once a sympathetic and appreciative reader.—*S. M. Stinchfield* (Mount Holyoke).

1645. **Whipple, G. M.** *Sex differences in Army Alpha scores in the secondary school.* *J. Educ. Res.*, 1927, 15, 269-275.—Army Alpha was given to all the freshmen and seniors in the Flint, Michigan, high schools. The group included:

freshmen, 227 boys and 317 girls; seniors, 129 boys and 161 girls. Each of the 8 tests of Alpha was scored separately for each of the four groups. The boys give better scores for both the freshmen and senior groups. The advantage of boys is unquestioned in the arithmetic test, the number-series test, and the information test. The author concludes that "for a final explanation of the residual sex difference in these test scores, we are led to assert that high-school boys as a group are really slightly superior intellectually to high-school girls as a group."—*S. W. Fernberger* (Pennsylvania).

[See also abstracts 1466, 1503, 1582, 1593, 1598, 1610, 1615, 1639.]

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